

Twelfth Census of the United States.

CENSUS BULLETIN.

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MANUFACTURES.

VERMONT.

HON. WILLIAM R. MERRIAM,
Director of the Census.

SIR: I transmit herewith, for publication in bulletin form, the statistics of manufacturing and mechanical industries for the state of Vermont for the census year 1900, taken in accordance with the provisions of section 7 of the act of March 3, 1899. This section requires that "The schedules of inquiries relating to the products of manufacturing and mechanical establishments shall embrace the name and location of each establishment; character of organization, whether individual, cooperative, or other form; date of commencement of operations; character of business or kind of goods manufactured; amount of capital invested; number of proprietors, firm members, copartners, or officers, and the amount of their salaries; number of employees, and the amount of their wages; quantity and cost of materials used in manufactures; amount of miscellaneous expenses; quantity and value of products; time in operation during the census year; character and quantity of power used; and character and number of machines employed."

In each of the above particulars the requirements of the law have been observed, but certain of the data thus elicited are reserved for publication in the final volumes.

These statistics were gathered partly by the enumerators and partly by special agents. Mr. Walter B. Gates, of Bennington, who was supervisor in charge of the population returns for the state of Vermont and also special agent in charge of the collection of the manufacturing statistics for the city of Burlington, has rendered valuable assistance in the preparation of the text for the accompanying report. A number of cities and towns in the state were withdrawn from the enumerators and their manufacturing statistics collected by special agents, in accordance with the further provision of section 7 of the Census Act. There is no city in Vermont with a population of 20,000 or more, and for the Twelfth Census the detailed statistics of cities by in-

dustries have been confined to those of that size. Wherever the phrase "urban manufactures" is used in this bulletin, it applies only to those cities and towns which were withdrawn from the enumerators and committed to special agents, and only to manufacturing establishments within the corporate limits of such places.

The statistics for Vermont are presented in 7 tables: Table 1 showing comparative figures for the state at the several censuses; Table 2 showing all the industries of the state divided between the hand trades and manufactures proper, and also the statistics of a governmental establishment and establishments with a product of less than \$500, which two latter classes were not reported at previous censuses; Table 3 showing the statistics of the 10 leading industries of the state for 1890 and 1900; Table 4 showing the urban manufactures of the state in comparison with the totals for the entire state exclusive of the cities and towns withdrawn from the enumerators; Table 5 showing the statistics for the state by counties; Table 6 showing the statistics for the state by specified industries; Table 7 showing the totals for all industries in the cities and towns withdrawn from the enumerators.

Table 1 shows the growth of manufactures in Vermont for the half century which terminates with the Twelfth Census. The manufacturing statistics of the censuses prior to 1850 were too imperfect and fragmentary in character to make it proper to reproduce them in such a table as a measure of industrial growth in the first half of the century. Owing to changes in the methods of taking the census, comparisons between the earlier and later decades, presented in Table 1, should be drawn only in the most general way. Nevertheless the rate of growth in Vermont manufactures may be fairly inferred from the figures presented.

In drafting the schedules of inquiry for the census of 1900 care was taken to preserve the basis of comparison with prior censuses. Comparison may be made safely

with respect to all the items of inquiry except those relating to capital, salaried officials, clerks, etc., their salaries, the average number of employees, and the total amount of wages paid. Live capital, that is, cash on hand, bills receivable, unsettled ledger accounts, raw materials, stock in process of manufacture, finished products on hand, and other sundries, was first called for at the census of 1890. No definite attempt was made, prior to the census of 1890, to secure a return of live capital invested.

Changes were made in the inquiries relating to employees and wages in order to eliminate defects found to exist on the form of inquiry adopted in 1890. At the census of 1890 the average number of persons employed during the entire year was called for, and also the average number employed at stated weekly rates of pay, and the average number was computed for the actual time the establishments were reported as being in operation. At the census of 1900 the greatest and least numbers of employees were reported, and also the average number employed during each month of the year. The average number of wage-earners (men, women, and children) employed during the entire year was ascertained by using 12, the number of calendar months, as a divisor into the total of the average numbers reported for each month. This difference in the method of ascertaining the average number of wage-earners during the entire year may have resulted in a variation in the number, and should be considered in making comparisons.

At the census of 1890 the number and salaries of proprietors and firm members actively engaged in the business or in supervision were reported, combined with clerks and other officials. In cases where proprietors and firm members were reported without salaries, the amount that would ordinarily be paid for similar services was estimated. At the census of 1900 only the number of proprietors and firm members actively engaged in the industry or in supervision was ascertained, and no salaries were reported for this class. It is therefore impossible to compare the number and salaries of salaried officials of any character for the two censuses.

Furthermore, the schedules for 1890 included in the wage-earning class, overseers, foremen, and superintendents (not general superintendents or managers), while the census of 1900 separates from the wage-earning class such salaried employees as general superintendents, clerks, and salesmen. It is possible and probable that this change in the form of the question has resulted in eliminating from the wage-earners, as reported by the present census, many high-salaried employees included in that group for the census of 1890.

In some instances, the number of proprietors and firm members, shown in the accompanying tables, falls short of the number of establishments reported. This is accounted for by the fact that no proprietors or firm members are reported for corporations or cooperative establishments. The number of salaried officials, clerks, etc., is the greatest number reported employed at any one time during the year, and this number may appear excessive as compared

with the amount of salaries paid. The seeming inconsistency is due to the large number of establishments reporting clerks employed but a short period, who received salaries that would be small if reckoned as for the entire year.

The reports show a capital of \$48,547,964 invested in manufactures and mechanical industries in the 4,071 establishments reporting for the state. This sum represents the value of land, buildings, machinery, tools, and implements, and the live capital utilized, but does not include the capital stock of any of the manufacturing corporations of the state. The value of the products is returned at \$57,646,715; to produce which involved an outlay of \$1,620,876 for salaries of officials, clerks, etc.; \$12,237,684 for wages; \$3,482,448 for miscellaneous expenses, including rent, taxes, etc.; and \$29,882,744 for materials used, mill supplies, freight, and fuel. It is not to be assumed, however, that the difference between the aggregate of these sums and the value of the products is, in any sense, indicative of the profits in the manufacture of the products during the census year. The census schedule takes no cognizance of the cost of selling manufactured articles, or of interest on capital invested, or of the mercantile losses incurred in the business, or of depreciation in plant. The value of the products given is the value as obtained or fixed at the shop or factory. This statement is necessary in order to avoid erroneous conclusions from the figures presented.

The value of products for the state, \$57,646,715, is the gross value, and not the net or true value. The difference between these two should be carefully noted. The gross value is found by adding the values of products in the separate establishments. But the finished product of one establishment is often the raw material for another. In such cases the value of the former reappears in the latter, and thus the original cost of certain materials may be included several times in the gross value. The net or true value is found by subtracting from the gross value the value of all materials purchased in a partly manufactured form. In this way the duplications in the gross value are eliminated.

At the census of 1890 the schedule was so framed that it was impossible to find the net or true value. In the present census the schedule asked for the value of the materials in two classes, those purchased in the crude state and those purchased in the partly manufactured form. From the answers to these questions the net or true value of products may be computed. Thus, in this state, the gross value of products for 1900 was \$57,646,715. The value of materials purchased in a partly manufactured form was \$16,863,515. The difference between them, \$40,783,200, is the net or true value of products, and represents the increase in the value of raw materials resulting from the various processes of manufacture.

Very respectfully,



Chief Statistician for Manufactures.

VERMONT.

Table 1 shows the manufacturing and mechanical industries of the state of Vermont as returned at the censuses of 1850 to 1900, inclusive, with the percentages of increase for each decade. This table also presents the average number of wage-earners employed by manufacturing estab-

lishments, in comparison with the total population of the state, and the value of the land and buildings owned and reported by manufacturers as capital, in comparison with the assessed value of all real estate and improvements.

TABLE 1.—COMPARATIVE SUMMARY, 1850 TO 1900, WITH PER CENT OF INCREASE FOR EACH DECADE.

| | DATE OF CENSUS. | | | | | | PER CENT OF INCREASE. | | | | |
|---|-----------------|---------------|--------------|--------------|--------------|--------------|-----------------------|--------------------|--------------------|--------------------|--------------------|
| | 1900 | 1890 | 1880 | 1870 | 1860 | 1850 | 1890 to 1900 | 1880 to 1890 | 1870 to 1880 | 1860 to 1870 | 1850 to 1860 |
| Number of establishments | 4,071 | 3,081 | 2,874 | 3,270 | 1,883 | 1,849 | 34.3 | 5.5 | 112.1 | 78.7 | 1.8 |
| Capital | \$48,547,964 | \$32,768,291 | \$23,295,224 | \$20,329,687 | \$9,498,617 | \$5,001,377 | 48.2 | 40.8 | 14.4 | 114.0 | 89.9 |
| Salaries of officials, clerks, etc., number | 1,772 | 2,776 | (3) | (3) | (3) | (3) | 36.1 | 12.9 | --- | --- | --- |
| Salaries | \$1,620,376 | \$1,668,996 | (3) | (3) | (3) | (3) | --- | --- | --- | --- | --- |
| Wage-earners, average number | 29,455 | 22,119 | 17,540 | 18,686 | 10,497 | 8,445 | 38.2 | 26.1 | 16.1 | 78.0 | 24.8 |
| Total wages | \$12,237,684 | \$8,427,553 | \$5,194,479 | \$6,264,581 | \$3,004,986 | \$2,202,848 | 45.2 | 63.2 | 117.6 | 108.4 | 36.4 |
| Men, 16 years and over | 24,714 | 18,985 | 14,438 | 16,901 | 8,563 | 6,394 | 30.2 | 31.5 | 111.4 | 90.4 | 24.2 |
| Wages | \$11,027,185 | \$7,587,075 | (3) | (3) | (3) | (3) | 45.8 | --- | --- | --- | --- |
| Women, 16 years and over | 4,478 | 2,745 | 2,271 | 1,872 | 1,934 | 1,551 | 63.1 | 20.9 | 21.3 | 18.2 | 24.7 |
| Wages | \$1,160,491 | \$784,156 | (3) | (3) | (3) | (3) | 48.8 | 158.2 | 62.0 | --- | --- |
| Children, under 16 years | 263 | 889 | 831 | 518 | (3) | (3) | 32.4 | --- | --- | --- | --- |
| Wages | \$44,008 | \$56,322 | (3) | (3) | (3) | (3) | 121.9 | --- | --- | --- | --- |
| Miscellaneous expenses | \$3,482,448 | \$2,188,326 | (4) | (4) | (4) | (4) | --- | --- | --- | --- | --- |
| Cost of materials used | \$29,882,744 | \$20,488,174 | \$18,350,677 | \$17,007,769 | \$7,608,858 | \$4,172,552 | 46.2 | 11.5 | 7.8 | 123.5 | 82.4 |
| Value of products, including custom work and repairing | \$57,646,715 | \$38,340,066 | \$31,854,366 | \$32,184,606 | \$14,687,807 | \$8,570,920 | 50.4 | 22.3 | 12.6 | 119.9 | 70.8 |
| Total population | 348,641 | 382,422 | 332,286 | 380,551 | 315,098 | 314,120 | 8.4 | (5) | 0.5 | 4.9 | 0.3 |
| Wage-earners engaged in manufactures | 29,455 | 22,119 | 17,540 | 18,686 | 10,497 | 8,445 | 38.2 | 26.1 | 16.1 | 78.0 | 24.8 |
| Per cent of total population | 8.6 | 6.7 | 5.3 | 5.7 | 3.3 | 2.7 | --- | --- | --- | --- | --- |
| Assessed value of real estate | \$118,950,024 | \$112,895,125 | \$71,436,623 | \$80,993,100 | \$65,639,973 | \$57,820,369 | 5.4 | 58.0 | 111.8 | 28.4 | 14.5 |
| Value of land and buildings invested in manufactures ⁷ | \$14,828,028 | \$8,602,038 | (3) | (3) | (3) | (3) | --- | --- | --- | --- | --- |
| Per cent of assessed value | 12.5 | 7.6 | --- | --- | --- | --- | --- | --- | --- | --- | --- |

¹ Decrease.

² Includes proprietors and firm members, with their salaries; number only reported in 1900. (See Table 6.)

³ Not reported separately.

⁴ Not reported.

⁵ Less than one-tenth of 1 per cent.

⁶ As given in State and City Supplement, Dana's Commercial and Financial Chronicle, April 13, 1901.

⁷ Does not include the value of rented property.

Table 1 reveals the generally steady growth of the manufacturing industries of Vermont during the half century, a growth which is striking when compared with the small increase of population.

The total population of the state in 1850 was 314,120, and in 1900, 348,641, an increase of only 29,521, or 9.4 per cent, while the average number of wage-earners employed in manufacturing establishments has increased from 8,445 in 1850, to 29,455 in 1900, or 248.8 per cent, embracing in 1900, 8.6 per cent of the population as compared with 2.7 per cent in 1850. Probably the best indication of the importance of the wage-earning class is afforded by the greatest number employed at any one time during the year. In 1900 this was 40,160, or 11.7 per cent of the total population of the state.

The increase in the value of products from 1850 to 1860 was 70.8 per cent; from 1860 to 1870, 119.9 per cent; from 1880 to 1890, 22.3 per cent; and from 1890 to 1900, 50.4 per cent. From 1870 to 1880, there was a decrease of 2.6 per cent. The values however for 1870 were expressed in a currency which was at a discount in gold, and should, therefore, be reduced about one-fifth for purposes of comparison with other census years.

Table 2 divides the industries of the state between the hand trades and the manufactures proper. This table also gives the statistics for a governmental establishment and establishments with a product of less than \$500; these were not reported at previous censuses, and therefore are omitted from the other tables and their use confined to Table 2.

TABLE 2.—SUMMARY FOR ALL ESTABLISHMENTS.

| CLASSES. | Number of establishments. | Capital. | Proprietors and firm members. | WAGE-EARNERS. | | Miscellaneous expenses. | COST OF MATERIALS USED. | | | | Value of products, including custom work and repairing. |
|--|---------------------------|--------------|-------------------------------|-----------------|--------------|-------------------------|-------------------------|-------------------------|---|---------------------|---|
| | | | | Average number. | Total wages. | | Total. | Purchased in raw state. | Purchased in partially manufactured form. | Fuel, freight, etc. | |
| Total | 4,817 | \$48,962,114 | 5,367 | 29,576 | \$12,249,695 | \$3,498,656 | \$29,965,851 | \$11,292,370 | \$16,939,006 | \$1,734,475 | \$57,872,769 |
| Hand trades ¹ | 1,470 | 1,941,500 | 1,627 | 2,409 | 1,028,435 | 200,586 | 1,766,003 | 16,061 | 1,676,190 | 73,752 | 4,311,933 |
| Governmental establishment | 1 | 38,598 | | 4 | 2,037 | 183 | 17,858 | | 16,143 | 1,715 | 29,098 |
| Establishments with a product of less than \$500 | 745 | 375,552 | 793 | 116 | 9,914 | 16,025 | 65,249 | 5,823 | 59,348 | 78 | 196,956 |
| All other establishments | 2,601 | 46,606,464 | 2,947 | 27,046 | 11,209,249 | 8,281,862 | 28,116,741 | 11,270,486 | 15,187,325 | 1,658,930 | 53,331,782 |

¹ Includes bicycle and tricycle repairing, 40; blacksmithing and wheelwrighting, 613; boots and shoes, custom work and repairing, 101; carpentering, 78; clothing, men's, custom work and repairing, 68; clothing, women's, dressmaking, 80; dyeing and cleaning, 3; furniture, cabinetmaking, repairing, and upholstering, 50; lock and gun smithing, 5; masonry, brick and stone, 29; millinery, custom work, 151; painting, house, sign, etc., 90; paper hanging, 2; plumbing, and gas and steam fitting, 56; sewing machine repairing, 1; taxidermy, 3; watch, clock, and jewelry repairing, 91.

Of the 4,817 establishments of all classes, shown in this table, 2,215, or 46 per cent, were small shops included in the groups of "hand trades" and "establishments with a product of less than \$500." The value of the products of these establishments, consisting principally of the sums received for custom work and repairing, amounted to \$4,508,889, or only 7.8 per cent of the total products of the state.

In addition to the 4,817 active establishments in the state during the census year, with a capital of \$48,962,114, shown in Table 2, there were 23 idle establishments, with a capital of \$104,160, divided as follows:

| INDUSTRIES. | Number of idle establishments. | Capital. |
|--|--------------------------------|----------|
| Foundry and machine shop products | 2 | \$12,000 |
| Lumber, planing mill products, including sash, doors, and blinds | 1 | 82,000 |
| Marble and stone work | 1 | 11,500 |
| Paper and wood pulp | 1 | 15,000 |
| Woolen goods | 3 | 13,370 |
| All other industries | 15 | 20,290 |

Comparative statistics for the 10 leading industries in Vermont are presented in Table 3.

TABLE 3.—COMPARATIVE SUMMARY OF TEN LEADING INDUSTRIES.

| INDUSTRIES. | Year. | Number of establishments. | Capital. | WAGE-EARNERS. | | Miscellaneous expenses. | Cost of materials used. | Value of products, including custom work and repairing. |
|--|-------|---------------------------|--------------|-----------------|--------------|-------------------------|-------------------------|---|
| | | | | Average number. | Total wages. | | | |
| Total for selected industries for state | 1900 | 1,618 | \$29,260,101 | 15,000 | \$6,631,018 | \$1,645,682 | \$20,052,558 | \$34,366,777 |
| | 1890 | 1,413 | 20,304,340 | 13,638 | 5,013,498 | 1,014,833 | 13,778,997 | 23,947,027 |
| Increase, 1890 to 1900 | | 205 | 8,455,261 | 1,312 | 1,667,520 | 630,844 | 6,273,561 | 10,419,750 |
| Per cent of increase | | 14.5 | 40.6 | 9.6 | 33.3 | 62.2 | 45.5 | 43.5 |
| Per cent of total of all industries in state | 1900 | 39.7 | 60.3 | 50.9 | 54.6 | 47.3 | 67.1 | 59.6 |
| | 1890 | 46.6 | 63.5 | 61.9 | 59.5 | 46.4 | 67.4 | 62.5 |
| Cheese, butter, and condensed milk, factory product | 1900 | 255 | 1,222,892 | 522 | 256,377 | 66,992 | 4,835,289 | 5,656,265 |
| | 1890 | 123 | 367,353 | 263 | 77,403 | 14,947 | 1,387,445 | 1,602,641 |
| Flouring and grist mill products | 1900 | 211 | 1,289,497 | 190 | 81,863 | 48,985 | 2,679,793 | 3,222,347 |
| | 1890 | 217 | 1,343,356 | 251 | 95,685 | 49,906 | 2,452,944 | 2,890,174 |
| Foundry and machine shop products | 1900 | 61 | 2,507,313 | 1,288 | 626,794 | 274,520 | 778,107 | 2,185,510 |
| | 1890 | 61 | 1,398,576 | 733 | 369,014 | 60,310 | 488,953 | 1,199,067 |
| Hosiery and knit goods | 1900 | 14 | 1,589,786 | 1,041 | 389,667 | 108,006 | 1,115,324 | 1,834,685 |
| | 1890 | 10 | 754,882 | 705 | 256,085 | 63,188 | 649,004 | 1,105,958 |
| Lumber and timber products | 1900 | 653 | 7,051,523 | 3,625 | 1,184,904 | 176,026 | 3,377,181 | 6,131,808 |
| | 1890 | 779 | 7,789,874 | 6,054 | 1,501,776 | 294,463 | 3,854,670 | 6,958,674 |
| Lumber, planing mill products, including sash, doors, and blinds | 1900 | 46 | 2,095,507 | 814 | 301,215 | 121,913 | 1,856,136 | 2,598,581 |
| | 1890 | 81 | 1,050,757 | 628 | 270,484 | 56,403 | 1,354,214 | 1,868,760 |
| Marble and stone work | 1900 | 54 | 3,603,111 | 1,773 | 912,614 | 183,696 | 805,476 | 2,484,551 |
| | 1890 | 46 | 993,236 | 1,353 | 674,317 | 1,437 | 582,202 | 1,656,637 |
| Monuments and tombstones | 1900 | 268 | 1,844,015 | 2,974 | 1,773,103 | 268,391 | 1,143,008 | 4,045,611 |
| | 1890 | 96 | 650,513 | 1,095 | 608,240 | 59,552 | 843,680 | 1,492,384 |
| Paper and wood pulp | 1900 | 27 | 4,853,806 | 1,216 | 571,013 | 265,569 | 1,684,922 | 3,384,773 |
| | 1890 | 21 | 3,151,911 | 1,065 | 487,529 | 235,742 | 1,280,722 | 2,449,049 |
| Wool manufactures | 1900 | 24 | 3,202,151 | 1,557 | 603,963 | 131,575 | 1,732,372 | 2,822,646 |
| | 1890 | 29 | 3,304,382 | 1,541 | 582,965 | 178,385 | 1,435,163 | 2,723,683 |

The 10 leading industries of the state in 1900, as shown in Table 3, embrace 1,618 establishments, or 39.7 per cent of the total number in the state; \$29,260,101, or 60.3 per cent of the total capital; 15,000, or 50.9 per cent of the total average number of wage-earners; \$6,681,018, or 54.6 per cent of the total wages; and \$34,366,777, or 59.6 per cent of the total products. In the discussion which follows, these industries are ranked with reference to the value of the products.

Table 3 shows that the manufacture of lumber and timber is the most important in the state. The 658 establishments reported for this industry gave employment to 3,625 persons, or 12.3 per cent of the wage-earners in the state, and paid in wages, \$1,184,904, or 9.7 per cent of the total wages of the state. The value of the products was \$6,131,808, or 10.6 per cent of the value of all the products of the state. In 1890 the establishments numbered 779, the wage-earners, 6,054, and the value of the products was \$6,958,674.

Allied to the manufacture of lumber and timber is the manufacture of planing mill products, including sash, doors, and blinds. For this industry 46 establishments were reported, an increase of 48.4 per cent over 1890, when the number was 31. The number of wage-earners increased from 628 in 1890 to 814 in 1900, or 29.6 per cent; and the value of the products from \$1,868,760 to \$2,598,581, or 39.1 per cent. Sawmills were among the first mechanical establishments in the state. At the close of the Revolutionary war, Lake Champlain became the principal avenue of commerce between the settlements along the lake and Canada. Large quantities of pine and oak timber were cut in the forests that skirted the lake and larger rivers, and were floated in rafts by means of jury-mast and sail down the lake, thence by the Richelieu and St. Lawrence rivers to Quebec, and shipped to Europe.¹ With the removal of the natural barriers to navigation in the Richelieu River and the opening of the railroad from Burlington to the New England markets, Burlington became the center of a large lumber trade. In 1882 the sales of the Burlington lumber market amounted to 117,000,000 feet,¹ the city ranking third in importance as a lumber market in the United States. Since the establishment of all-rail connections from Canadian mills to the Boston market, permitting winter shipments and avoiding reshipment, there has been a gradual decrease in the city's lumber trade, which, however, still remains its most important industry.

Next in importance stands the factory manufacture of cheese, butter, and condensed milk. In the decade from 1890 to 1900 the number of establishments increased from 123 to 255, or 107.3 per cent; the capital from \$367,353 to \$1,222,892, or 232.9 per cent; the wage-earners from 263 to 522, or 98.5 per cent; and the products from \$1,602,641 to \$5,656,265, or 252.9 per cent.

The manufacture of monuments and tombstones is third in importance, and also shows a notable increase in all

particulars, the percentages of gain being nearly the same in number of establishments, average number of wage-earners, and value of products. In 1890, 96 establishments were reported, and in 1900, 268, an increase of 179.2 per cent. The wage-earners in 1890 numbered 1,095, and in 1900, 2,974, an increase of 171.6 per cent. The value of products in 1890 was \$1,492,884, and in 1900, \$4,045,611, an increase of 171.1 per cent. The showing for marble and stone work, an allied industry, is also satisfactory. The number of establishments in 1890 was 46, compared with 54 in 1900, an increase of only 17.4 per cent; but the value of products, \$1,656,637 in 1890, amounted to \$2,484,551 in 1900, an increase of 50 per cent. Both industries owe their importance to extensive quarries.² A large proportion of the marble used in the United States is obtained from quarries in Vermont. It was not until 1785 that the first quarry was opened by Isaac Underhill on land in Dorset. In 1805 a quarry was started in Middlebury. The largest producing quarries are on Otter Creek, Proctor and West Rutland being the principal quarrying towns. Quarries are operated at different points in the western part of the state, extending from Isle La Motte, where black marble is found, to Bennington county. These marbles are very beautiful in finish and texture. The manufacture of marble monuments as an important industry dates from 1808. The stock was first taken from the top or outer edge of the layers, where the strata could readily be split into sheets of suitable thickness. These sheets were cut down with a chisel into the desired shape. Marble was first sawed in South Dorset in 1818, and found a market in Boston, New York, Philadelphia, Cleveland, and intermediate points.

The quarrying of granite began in 1812.³ During the past twenty-five years quarries have been opened in Barre, Hardwick, Williamstown, Dummerston, Berlin, Woodbury, and Ryegate.³ The city of Barre had the largest per cent of increase in population of any place in the state in the last decade, due almost entirely to the development of these quarries and the manufactures allied to them.

It is interesting to note in this connection that the quarrying and cutting of slate is an important industry of southwestern Vermont. The first quarry was opened in 1839 at Fair Haven and was worked eight years before roofing slate was manufactured.⁴ There were 23 establishments in the state in 1900 (see Table 6), engaged in the manufacture of roofing and roofing materials. These reported a capital of \$545,914; 1,604 wage-earners; and products valued at \$907,744. In 1890 there were only 2 establishments reported for the industry.

The 27 establishments reported in 1900 as engaged in the manufacture of paper and wood pulp had a capital of \$4,853,806, and gave employment to 1,216 wage-earners, with total wages of \$571,018. The products were valued at \$3,384,773. The increase over 1890 in number of estab-

² Ibid., pages 1514-1518.

³ Report of the Vermont State Board of Agriculture, 1894, pages 293 and 295.

⁴ History of Rutland County, Vermont, by H. P. Smith and W. S. Rann, pages 192 and 193.

¹ The New England States, edited by W. T. Davis, Vol. III, pages 1524-1526.

lishments was 28.6 per cent; in number of wage-earners, 14.2 per cent; and in value of products, 38.2 per cent. This industry is largely located at Bellows Falls on the Connecticut River, and is favored by unfailling waterpower and adjacent forests.

The manufacture of flouring and grist mill products in a total of 211 establishments, with a capital of \$1,289,497, gave employment to 190 wage-earners in 1900, and paid in wages \$81,363. The value of the products amounted to \$3,222,347. In 1890 there were 217 establishments having a capital of \$1,343,356; 251 wage-earners with total wages of \$95,685; and products valued at \$2,890,174.

In wool manufactures 24 establishments were reported in 1900, with a capital of \$3,202,151; 1,557 wage-earners, with total wages of \$603,963; and products valued at \$2,822,646. In 1890 there were 29 establishments having a capital of \$3,304,382, and products to the value of \$2,723,683. The pioneer woolen manufacturer was Joel Valentine, who began the business in 1824.¹

The 61 establishments reported for the manufacture of foundry and machine shop products in 1900, had a capital of \$2,507,813; 1,288 wage-earners, with total wages of \$626,794; and products valued at \$2,185,510. While the number of establishments remained the same as in 1890, the capital was larger by 79.3 per cent, and the value of products increased 82.3 per cent.

The manufacture of hosiery and knit goods showed an increase in establishments from 10 in 1890 to 14 in 1900, or 40 per cent, and in value of products, an increase from \$1,105,958 in 1890 to \$1,834,685 in 1900, or 65.9 per cent.

Table 4 presents the totals for the manufacturing industries of the 21 cities and towns withdrawn from the enumerators and places them in comparison with the totals for the entire state, and the state exclusive of these cities and towns.

¹ The New England States, Vol. III, page 1551.

TABLE 4.—URBAN MANUFACTURES.

| | Number of establishments. | Capital. | Proprietors and firm members. | WAGE-EARNERS. | | Miscellaneous expenses. | Cost of materials used. | Value of products, including custom work and repairing. |
|--|---------------------------|--------------|-------------------------------|-----------------|--------------|-------------------------|-------------------------|---|
| | | | | Average number. | Total wages. | | | |
| Total for state..... | 4,071 | \$48,547,964 | 4,574 | 29,455 | \$12,237,684 | \$8,482,448 | \$29,882,744 | \$57,046,715 |
| Total for urban manufactures..... | 1,617 | 26,361,298 | 1,885 | 17,617 | 7,665,220 | 2,516,564 | 14,779,810 | 31,861,298 |
| Barre..... | 239 | 1,848,544 | 366 | 2,123 | 1,315,790 | 215,116 | 993,625 | 8,242,274 |
| Bennington..... | 82 | 3,129,196 | 85 | 1,855 | 701,080 | 161,755 | 1,443,830 | 2,805,608 |
| Brandon..... | 61 | 205,645 | 69 | 289 | 83,472 | 11,816 | 158,691 | 328,249 |
| Battleboro..... | 119 | 1,334,492 | 132 | 854 | 376,647 | 90,213 | 665,599 | 1,544,457 |
| Burlington..... | 196 | 5,066,377 | 199 | 2,794 | 1,008,188 | 1,064,709 | 3,751,186 | 7,094,538 |
| Colchester..... | 31 | 1,298,233 | 29 | 932 | 251,499 | 81,797 | 764,284 | 1,258,608 |
| Derby..... | 19 | 215,924 | 17 | 184 | 71,200 | 7,101 | 351,220 | 581,462 |
| Fair Haven..... | 62 | 381,736 | 77 | 346 | 137,056 | 15,391 | 213,330 | 488,858 |
| Lyndon..... | 38 | 159,129 | 42 | 71 | 20,501 | 24,352 | 91,049 | 221,290 |
| Montpelier..... | 121 | 950,624 | 158 | 1,019 | 510,450 | 65,065 | 614,969 | 1,591,958 |
| Newport..... | 23 | 293,336 | 34 | 245 | 84,837 | 19,504 | 353,444 | 549,522 |
| Northfield..... | 56 | 356,110 | 64 | 276 | 112,263 | 14,983 | 339,433 | 561,673 |
| Poultney..... | 49 | 437,656 | 58 | 349 | 112,689 | 11,789 | 190,564 | 405,379 |
| Proctor..... | 5 | 2,465 | 5 | 2 | 625 | 125 | 3,079 | 6,010 |
| Rockingham..... | 53 | 664,902 | 65 | 359 | 163,457 | 143,297 | 504,023 | 961,023 |
| Rutland..... | 186 | 2,112,530 | 207 | 1,791 | 773,304 | 133,616 | 1,044,566 | 2,456,677 |
| St. Albans..... | 79 | 1,192,735 | 76 | 1,178 | 519,292 | 93,355 | 1,084,772 | 1,850,590 |
| St. Johnsbury..... | 89 | 3,790,028 | 91 | 1,195 | 568,619 | 132,521 | 951,643 | 2,838,906 |
| Springfield..... | 46 | 985,356 | 40 | 602 | 286,195 | 76,870 | 540,859 | 1,210,286 |
| Swanton..... | 46 | 306,698 | 55 | 259 | 80,546 | 23,643 | 295,193 | 480,601 |
| West Rutland..... | 17 | 2,134,582 | 16 | 944 | 487,560 | 125,541 | 474,446 | 1,440,334 |
| Total for state, exclusive of urban manufactures..... | 2,454 | 22,186,666 | 2,689 | 11,838 | 4,572,464 | 965,884 | 15,102,934 | 25,785,417 |
| Per cent of urban manufactures to total for state..... | 39.7 | 54.8 | 41.2 | 59.8 | 62.6 | 72.3 | 49.5 | 55.3 |

Of the 4,071 establishments in the state, 1,617, or 39.7 per cent, are located in these 21 cities and towns. The capital reported for these establishments is \$26,361,298, or 54.3 per cent of that for the entire state. They furnished employment to 17,617 wage-earners, or 59.8 per cent of the total number; paid \$7,665,220 in wages, or 62.6 per cent of the total amount; and the value of their products,

\$31,861,298, formed 55.3 per cent of the total for the state.

Table 5 shows the totals for the state by counties.

Table 6 shows the totals for the state by specified industries.

Table 7 shows the totals for all industries in the cities and towns withdrawn from the enumerators.

TABLE 5.—MANUFACTURES

| COUNTIES AND MANUFACTURING AND MECHANICAL INDUSTRIES. | Number of establishments. | CAPITAL. | | | | | Proprietors and firm members. | SALARIED OFFICIALS, CLERKS, ETC. | | AVERAGE NUMBER OF WAGE-EARNERS AND TOTAL WAGES. | |
|---|---------------------------|--------------|-------------|-------------|-----------------------------------|--------------------|-------------------------------|----------------------------------|-------------|---|--------------|
| | | Total. | Land. | Buildings. | Machinery, tools, and implements. | Cash and sundries. | | Number. | Salaries. | Total. | |
| | | | | | | | | | | Average number. | Wages. |
| 1 The State..... | 4,071 | \$48,547,964 | \$6,738,461 | \$8,089,567 | \$11,682,873 | \$22,037,063 | 4,574 | 1,772 | \$1,620,376 | 29,455 | \$12,237,684 |
| 2 Addison..... | 223 | 1,473,374 | 334,631 | 203,026 | 353,776 | 581,941 | 247 | 74 | 60,201 | 818 | 303,390 |
| 3 Bennington..... | 235 | 5,341,345 | 703,740 | 806,122 | 1,397,825 | 2,423,653 | 241 | 146 | 156,601 | 2,894 | 1,075,539 |
| 4 Caledonia..... | 326 | 5,282,545 | 632,765 | 1,046,274 | 1,081,013 | 2,622,493 | 370 | 183 | 139,443 | 2,039 | 986,984 |
| 5 Chittenden..... | 383 | 7,178,072 | 497,674 | 1,107,053 | 1,673,225 | 3,900,120 | 388 | 308 | 362,249 | 4,175 | 1,434,046 |
| 6 Essex..... | 71 | 1,511,014 | 725,728 | 266,425 | 206,012 | 311,851 | 75 | 20 | 16,250 | 477 | 160,119 |
| 7 Franklin..... | 301 | 2,735,020 | 369,463 | 441,927 | 875,666 | 1,047,964 | 329 | 169 | 131,490 | 2,107 | 804,053 |
| 8 Grand Isle..... | 18 | 40,805 | 1,000 | 11,250 | 20,140 | 8,475 | 14 | 1 | 120 | 10 | 5,611 |
| 9 Lamoille..... | 166 | 994,737 | 203,470 | 133,785 | 220,590 | 481,912 | 189 | 21 | 12,388 | 543 | 196,421 |
| 10 Orange..... | 230 | 741,236 | 78,263 | 106,518 | 226,285 | 271,220 | 247 | 40 | 16,302 | 498 | 194,680 |
| 11 Orleans..... | 210 | 1,544,547 | 182,466 | 242,248 | 356,150 | 763,633 | 229 | 51 | 43,367 | 1,104 | 378,013 |
| 12 Rutland..... | 588 | 6,706,800 | 1,429,850 | 1,270,591 | 1,396,712 | 2,609,637 | 673 | 310 | 242,264 | 5,598 | 2,278,636 |
| 13 Washington..... | 606 | 3,846,303 | 463,307 | 440,032 | 914,674 | 2,022,635 | 795 | 145 | 115,592 | 3,933 | 2,129,735 |
| 14 Windham..... | 356 | 6,612,572 | 834,432 | 1,107,593 | 1,362,363 | 2,748,129 | 399 | 136 | 135,382 | 2,690 | 1,209,757 |
| 15 Windsor..... | 353 | 4,539,459 | 370,614 | 781,063 | 1,099,437 | 2,288,345 | 378 | 118 | 133,727 | 2,514 | 1,080,700 |

TABLE 6.—MANUFACTURES BY

| 1 | All industries..... | 4,071 | \$48,547,964 | \$6,738,461 | \$8,089,567 | \$11,682,873 | \$22,037,063 | 4,574 | 1,772 | \$1,620,376 | 29,455 | \$12,237,684 |
|----|---|-------|--------------|-------------|-------------|--------------|--------------|-------|-------|-------------|--------|--------------|
| 2 | Agricultural implements..... | 17 | 484,277 | 20,500 | 64,700 | 67,776 | 331,301 | 19 | 24 | 18,267 | 211 | 85,346 |
| 3 | Awnings, tents, and sails..... | 3 | 7,750 | | | 5,250 | 5,250 | 5 | | | 11 | 5,500 |
| 4 | Baskets, and rattan and willow ware..... | 3 | 21,200 | 3,450 | 6,000 | 5,950 | 5,800 | 5 | | | 39 | 15,975 |
| 5 | Bicycle and tricycle repairing..... | 40 | 50,390 | 5,850 | 8,725 | 17,135 | 18,630 | 45 | 1 | 300 | 32 | 12,568 |
| 6 | Blacksmithing and wheelwrighting..... | 613 | 582,113 | 63,712 | 133,060 | 122,511 | 212,330 | 652 | 2 | 300 | 230 | 99,501 |
| 7 | Bookbinding and blank book making..... | 4 | 10,000 | | | 3,350 | 1,650 | 5 | | | 21 | 5,093 |
| 8 | Boots and shoes, custom work and repairing..... | 101 | 51,556 | 6,330 | 14,425 | 13,153 | 17,533 | 106 | 1 | 50 | 43 | 16,429 |
| 9 | Boots and shoes, factory product..... | 6 | 478,134 | 4,800 | 42,333 | 77,596 | 353,395 | 2 | 40 | 32,114 | 355 | 123,771 |
| 10 | Bottling..... | 7 | 39,120 | 4,600 | 11,000 | 17,100 | 6,420 | 8 | 3 | 1,296 | 20 | 9,216 |
| 11 | Boxes, wooden packing..... | 34 | 207,719 | 14,712 | 23,932 | 44,550 | 124,475 | 33 | 9 | 4,400 | 201 | 70,020 |
| 12 | Bread and other bakery products..... | 50 | 259,347 | 21,050 | 45,550 | 32,907 | 110,340 | 54 | 33 | 25,433 | 143 | 59,238 |
| 13 | Brick and tile..... | 15 | 99,298 | 14,700 | 23,520 | 14,525 | 46,533 | 15 | 5 | 3,364 | 115 | 42,732 |
| 14 | Brooms and brushes..... | 3 | 55,215 | 2,350 | 9,100 | 8,575 | 35,190 | 3 | 3 | 2,250 | 50 | 14,950 |
| 15 | Carpentering..... | 78 | 239,337 | 22,725 | 33,965 | 57,240 | 125,907 | 92 | 4 | 1,640 | 300 | 370,727 |
| 16 | Carriages and wagons..... | 86 | 357,035 | 41,000 | 105,550 | 55,010 | 155,475 | 105 | 8 | 1,275 | 196 | 95,516 |
| 17 | Cars and general shop construction and repairs by steam railroad companies..... | 7 | 711,261 | 92,100 | 274,200 | 216,453 | 123,503 | | 32 | 23,744 | 779 | 446,017 |
| 18 | Cheese, butter, and condensed milk, factory product..... | 255 | 1,222,392 | 53,712 | 315,163 | 494,522 | 359,495 | 142 | 137 | 37,514 | 522 | 236,377 |
| 19 | Clothing, men's, custom work and repairing..... | 63 | 141,503 | 6,350 | 17,775 | 10,120 | 107,263 | 76 | 6 | 5,960 | 209 | 80,335 |
| 20 | Clothing, men's, factory product..... | 7 | 424,507 | 1,500 | 21,739 | 32,167 | 369,051 | 8 | 32 | 43,765 | 526 | 145,334 |
| 21 | Clothing, women's, dressmaking..... | 86 | 48,643 | 5,200 | 10,710 | 9,630 | 23,103 | 100 | 2 | 1,880 | 179 | 39,116 |
| 22 | Clothing, women's, factory product..... | 5 | 47,420 | 600 | 1,900 | 8,100 | 36,320 | 6 | 10 | 5,005 | 202 | 53,123 |
| 23 | Confectionery..... | 11 | 234,600 | 24,633 | 65,000 | 27,951 | 116,976 | 14 | 40 | 25,903 | 115 | 36,174 |
| 24 | Cooperage..... | 9 | 53,505 | 2,450 | 7,300 | 17,575 | 26,130 | 15 | | | 31 | 24,705 |
| 25 | Cotton goods..... | 5 | 1,932,933 | 138,754 | 451,175 | 796,312 | 496,172 | 20 | 20 | 25,579 | 1,015 | 259,758 |
| 26 | Dyeing and cleaning..... | 3 | 6,233 | 1,600 | 3,900 | 250 | 503 | 3 | | | 1 | 170 |
| 27 | Electrical construction and repairs..... | 5 | 18,032 | 300 | 2,000 | 2,500 | 13,232 | 7 | 3 | 751 | 15 | 5,266 |
| 28 | Flouring and grist mill products..... | 211 | 1,239,497 | 172,155 | 327,215 | 276,826 | 513,301 | 251 | 29 | 20,664 | 190 | 31,363 |
| 29 | Food preparations..... | 4 | 115,376 | 10,700 | 32,545 | 27,637 | 44,494 | 2 | 15 | 7,332 | 53 | 13,727 |
| 30 | Foundry and machine shop products..... | 61 | 2,507,313 | 224,061 | 292,723 | 660,557 | 1,330,469 | 53 | 143 | 135,395 | 1,233 | 624,794 |
| 31 | Fruits and vegetables, canning and preserving..... | 3 | 68,523 | | 13,500 | 20,316 | 34,712 | 6 | 4 | 4,100 | 111 | 21,732 |
| 32 | Fur goods..... | 3 | 27,536 | | | 1,303 | 26,233 | 4 | 1 | 730 | 16 | 5,733 |
| 33 | Furnishing goods, men's..... | 4 | 35,574 | 300 | 7,000 | 21,505 | 56,769 | 1 | 36 | 22,027 | 200 | 46,939 |
| 34 | Furniture, cabinetmaking, repairing, and upholstering..... | 50 | 98,229 | 12,350 | 32,050 | 9,410 | 44,419 | 53 | 2 | 900 | 43 | 19,433 |
| 35 | Furniture, factory product..... | 24 | 1,040,223 | 34,000 | 225,245 | 221,137 | 559,791 | 24 | 61 | 61,146 | 937 | 353,342 |
| 36 | Gas, illuminating and heating..... | 7 | 477,099 | 23,950 | 43,000 | 341,277 | 58,372 | 13 | 13 | 6,515 | 15 | 7,337 |
| 37 | Hardware..... | 5 | 64,000 | 4,200 | 4,850 | 13,405 | 36,545 | 5 | 3 | 3,600 | 71 | 22,334 |
| 38 | Hosiery and knit goods..... | 14 | 1,539,736 | 21,300 | 92,330 | 485,322 | 990,234 | 9 | 32 | 42,024 | 1,041 | 339,667 |
| 39 | House furnishing goods, not elsewhere specified..... | 4 | 28,466 | 50 | 2,500 | 7,713 | 13,193 | 5 | 3 | 2,333 | 29 | 10,347 |
| 40 | Krolin and other earth grinding..... | 3 | 19,550 | 1,600 | 12,500 | 2,200 | 3,250 | 2 | | | 22 | 6,017 |
| 41 | Leather, tanned, curried, and finished..... | 8 | 160,906 | 4,900 | 13,500 | 7,250 | 135,256 | 10 | 5 | 5,450 | 63 | 31,225 |
| 42 | Lime and cement..... | 13 | 176,325 | 51,900 | 31,450 | 19,925 | 73,550 | 17 | 2 | 1,400 | 132 | 57,257 |
| 43 | Lock and gun smithing..... | 5 | 4,532 | 100 | 300 | 2,540 | 1,092 | 6 | | | 2 | 430 |
| 44 | Looking-glass and picture frames..... | 14 | 15,400 | 150 | 400 | 1,725 | 13,125 | 16 | 3 | 625 | 11 | 3,303 |
| 45 | Lumber and timber products..... | 653 | 7,051,523 | 2,064,300 | 755,210 | 1,663,022 | 2,563,491 | 315 | 34 | 53,243 | 3,623 | 1,134,904 |
| 46 | Lumber, planing mill products, including sash, doors, and blinds..... | 46 | 2,095,507 | 139,625 | 276,029 | 213,232 | 1,466,571 | 54 | 53 | 62,563 | 314 | 301,215 |
| 47 | Mantels, slate, marble, and marbled..... | 4 | 13,010 | 700 | 3,100 | 1,210 | 3,000 | 8 | 1 | 430 | 7 | 2,330 |
| 48 | Marble and stone work..... | 54 | 3,603,111 | 1,223,333 | 303,900 | 724,031 | 351,347 | 77 | 129 | 131,933 | 1,773 | 912,614 |
| 49 | Masonry, brick and stone..... | 29 | 23,333 | 2,400 | 4,400 | 3,422 | 8,171 | 37 | | | 159 | 75,959 |
| 50 | Millinery, custom work..... | 164 | 203,770 | 12,110 | 35,665 | 7,092 | 153,903 | 171 | 12 | 6,034 | 176 | 44,933 |
| 51 | Mineral and soda waters..... | 12 | 74,760 | 4,300 | 17,200 | 14,500 | 33,766 | 20 | 9 | 6,473 | 23 | 12,171 |

BY COUNTIES: 1900.

| AVERAGE NUMBER OF WAGE-EARNERS AND TOTAL WAGES—continued. | | | | | | MISCELLANEOUS EXPENSES. | | | | | COST OF MATERIALS USED. | | | Value of products, including custom work and repairing. | |
|---|--------------|---------------------------|-------------|---------------------------|----------|-------------------------|----------------|--|---------------------------------|----------------|-------------------------|---|----------------------------------|---|----|
| Men, 16 years and over. | | Women, 16 years and over. | | Children, under 16 years. | | Total. | Rent of works. | Taxes, not including internal revenue. | Rent of offices, interest, etc. | Contract work. | Total. | Principal materials, including mill supplies and freight. | Fuel and rent of power and heat. | | |
| Average number. | Wages. | Average number. | Wages. | Average number. | Wages. | | | | | | | | | | |
| 24,714 | \$11,027,185 | 4,478 | \$1,166,491 | 263 | \$44,008 | \$3,482,448 | \$295,512 | \$236,018 | \$2,688,837 | \$262,081 | \$29,882,744 | \$29,046,271 | \$836,478 | \$57,646,715 | 1 |
| 780 | 284,197 | 79 | 17,478 | 9 | 1,715 | 52,818 | 9,589 | 5,668 | 87,056 | 50 | 803,779 | 788,453 | 17,326 | 1,567,740 | 2 |
| 1,860 | 759,760 | 957 | 302,149 | 77 | 13,630 | 227,188 | 29,196 | 19,673 | 165,397 | 12,922 | 2,458,592 | 2,395,674 | 62,918 | 4,727,244 | 3 |
| 2,015 | 968,890 | 70 | 17,528 | 4 | 566 | 212,510 | 16,338 | 28,964 | 130,744 | 41,464 | 2,113,821 | 2,066,052 | 47,769 | 4,934,108 | 4 |
| 8,114 | 1,180,720 | 1,007 | 243,736 | 54 | 9,590 | 1,178,415 | 44,479 | 31,266 | 1,019,965 | 82,705 | 5,662,940 | 5,568,794 | 94,146 | 10,014,681 | 5 |
| 376 | 184,042 | 89 | 28,233 | 12 | 2,844 | 87,153 | 2,465 | 4,863 | 29,835 | | 443,808 | 440,469 | 3,339 | 807,656 | 6 |
| 1,653 | 724,443 | 438 | 77,606 | 16 | 2,004 | 190,406 | 13,592 | 13,582 | 158,563 | 4,669 | 2,166,795 | 2,105,417 | 61,378 | 3,775,284 | 7 |
| 9 | 5,411 | 1 | 200 | | | 757 | 45 | 223 | 489 | | 116,670 | 114,214 | 2,456 | 186,459 | 8 |
| 521 | 190,137 | 23 | 5,694 | 4 | 590 | 89,878 | 3,578 | 5,814 | 30,486 | | 809,012 | 802,403 | 6,609 | 1,279,504 | 9 |
| 466 | 187,646 | 29 | 6,574 | 3 | 460 | 58,871 | 5,189 | 4,482 | 19,146 | | 851,049 | 834,175 | 16,874 | 1,344,326 | 10 |
| 944 | 340,432 | 146 | 35,368 | 14 | 2,213 | 23,802 | 5,454 | 7,742 | 48,513 | 2,093 | 1,756,092 | 1,742,767 | 13,325 | 2,701,525 | 11 |
| 5,014 | 2,159,022 | 557 | 115,965 | 27 | 3,649 | 361,172 | 60,501 | 37,233 | 244,387 | 19,051 | 3,156,367 | 3,039,207 | 117,160 | 7,408,312 | 12 |
| 3,714 | 2,075,776 | 215 | 53,109 | 4 | 850 | 336,294 | 47,269 | 22,049 | 184,146 | 82,330 | 2,856,308 | 2,761,070 | 95,288 | 6,799,986 | 13 |
| 2,272 | 1,083,697 | 402 | 124,105 | 16 | 1,955 | 492,434 | 33,777 | 33,589 | 421,906 | 3,322 | 3,428,917 | 3,223,125 | 205,792 | 6,410,540 | 14 |
| 2,026 | 933,012 | 465 | 143,746 | 23 | 3,942 | 266,309 | 24,100 | 26,120 | 203,114 | 12,975 | 3,258,594 | 3,166,451 | 92,143 | 5,739,540 | 15 |

SPECIFIED INDUSTRIES: 1900.

| | | | | | | | | | | | | | | | |
|-------|-----------|-----|---------|----|--------|---------|--------|--------|---------|--------|-----------|-----------|--------|-----------|----|
| 204 | 84,124 | 7 | 1,722 | | | 15,909 | 169 | 2,303 | 13,437 | | 168,515 | 154,060 | 9,455 | 399,637 | 2 |
| 7 | 8,630 | 4 | 1,870 | | | 845 | 660 | 30 | 155 | | 10,226 | 9,991 | 235 | 23,030 | 3 |
| 37 | 15,475 | 2 | 500 | | | 2,130 | 900 | 1,830 | 6,049 | | 6,049 | 6,049 | | 39,370 | 4 |
| 32 | 12,568 | | | | | 5,226 | 2,721 | 962 | 2,023 | 115 | 24,760 | 23,794 | 966 | 65,737 | 5 |
| 229 | 99,306 | | | 1 | 195 | 27,184 | 14,406 | 4,080 | 8,553 | 45 | 217,252 | 198,002 | 18,250 | 740,976 | 6 |
| 6 | 2,543 | 15 | 2,550 | | | 2,007 | 740 | 63 | 1,104 | 100 | 1,676 | 1,508 | 170 | 14,475 | 7 |
| 40 | 16,077 | 3 | 352 | | | 6,950 | 5,194 | 376 | 1,380 | | 86,960 | 85,611 | 1,349 | 105,650 | 8 |
| 199 | 86,719 | 155 | 41,952 | 1 | 100 | 25,970 | 1,060 | 547 | 24,313 | 45 | 561,786 | 558,555 | 3,231 | 792,707 | 9 |
| 20 | 9,216 | | | | | 5,310 | 372 | 243 | 4,695 | | 41,696 | 41,233 | | 133,300 | 10 |
| 184 | 66,451 | 16 | 3,492 | 1 | 77 | 6,834 | 2,822 | 724 | 3,238 | | 188,084 | 184,705 | 3,379 | 284,286 | 11 |
| 120 | 51,781 | 24 | 6,880 | 4 | 687 | 27,389 | 9,688 | 2,514 | 15,159 | 28 | 206,419 | 196,688 | 9,731 | 417,269 | 12 |
| 114 | 42,622 | | | 1 | 100 | 5,474 | 495 | 493 | 2,386 | 1,600 | 18,275 | 1,532 | 16,755 | 99,525 | 13 |
| 47 | 14,250 | | | 3 | 400 | 6,513 | | 603 | 6,910 | | 69,784 | 68,913 | | 111,508 | 14 |
| 800 | 370,727 | | | | | 47,131 | 2,338 | 1,842 | 5,438 | 37,513 | 593,010 | 590,053 | 2,957 | 1,245,607 | 15 |
| 196 | 95,516 | | | | | 14,535 | 2,234 | 2,902 | 3,718 | 631 | 110,709 | 104,590 | 6,119 | 821,315 | 16 |
| 779 | 446,017 | | | | | 4,614 | | 2,092 | 2,522 | | 350,401 | 338,849 | 11,552 | 824,776 | 17 |
| 509 | 232,894 | 13 | 3,483 | | | 66,992 | 4,905 | 5,373 | 54,511 | 2,203 | 4,835,289 | 4,827,130 | 58,159 | 5,656,205 | 18 |
| 91 | 46,994 | 118 | 33,341 | | | 15,697 | 9,162 | 1,049 | 4,636 | 850 | 122,769 | 120,284 | 2,475 | 312,625 | 19 |
| 73 | 39,309 | 453 | 106,025 | | | 32,076 | 3,480 | 544 | 28,052 | | 359,813 | 356,843 | 2,970 | 723,652 | 20 |
| 4 | 2,050 | 175 | 87,065 | | | 8,196 | 6,658 | 272 | 1,241 | 25 | 54,222 | 52,039 | 2,183 | 163,259 | 21 |
| 26 | 7,475 | 176 | 45,648 | | | 2,076 | 375 | 126 | 1,575 | | 115,429 | 114,548 | 881 | 197,955 | 22 |
| 58 | 24,576 | 56 | 11,473 | 1 | 125 | 23,322 | 3,736 | 1,411 | 23,675 | | 124,870 | 123,750 | 5,120 | 284,259 | 23 |
| 81 | 24,705 | | | | | 2,039 | 80 | 141 | 1,818 | | 86,112 | 85,383 | 729 | 105,965 | 24 |
| 498 | 131,465 | 495 | 114,375 | 82 | 13,913 | 43,282 | 2,388 | 1,842 | 5,438 | 37,513 | 593,010 | 590,053 | 2,957 | 1,245,607 | 25 |
| | | 1 | 170 | | | 249 | 150 | 66 | 33 | | 110,709 | 104,590 | 6,119 | 821,315 | 26 |
| 15 | 5,266 | | | | | 1,859 | 1,280 | 57 | 522 | | 27,672 | 27,606 | 66 | 45,672 | 27 |
| 187 | 80,818 | 2 | 445 | 1 | 100 | 43,985 | 8,245 | 9,790 | 30,950 | | 2,628,039 | 2,668,938 | 11,694 | 3,222,347 | 28 |
| 32 | 9,480 | 21 | 4,247 | | | 42,248 | 100 | 46 | 42,102 | | 61,768 | 60,391 | 1,377 | 124,370 | 29 |
| 1,279 | 624,732 | 8 | 1,732 | 1 | 330 | 274,529 | 9,943 | 15,490 | 224,788 | 24,358 | 773,107 | 741,440 | 31,667 | 2,185,610 | 30 |
| 64 | 15,140 | 45 | 6,362 | 2 | 260 | 3,390 | 450 | 210 | 2,730 | | 33,361 | 32,161 | 1,200 | 166,184 | 31 |
| 6 | 3,329 | 10 | 2,434 | | | 1,638 | 1,175 | 150 | 313 | | 12,200 | 12,100 | 160 | 28,848 | 32 |
| 37 | 14,373 | 161 | 32,258 | 2 | 353 | 18,963 | 3,414 | 545 | 7,606 | 7,398 | 32,063 | 31,052 | 1,011 | 191,027 | 33 |
| 45 | 19,066 | 2 | 233 | 1 | 90 | 8,298 | 3,492 | 918 | 3,888 | | 43,299 | 41,810 | 1,489 | 100,112 | 34 |
| 944 | 343,944 | 15 | 3,136 | 28 | 6,262 | 69,167 | 6,660 | 3,267 | 53,929 | 5,311 | 555,448 | 544,233 | 11,210 | 1,252,743 | 35 |
| 15 | 7,837 | | | | | 13,950 | 175 | 2,675 | 11,100 | | 20,191 | 19,054 | 1,137 | 71,015 | 36 |
| 42 | 16,736 | 27 | 5,139 | 2 | 459 | 3,134 | 470 | 114 | 1,350 | 1,200 | 39,439 | 37,764 | 1,675 | 91,325 | 37 |
| 887 | 161,507 | 661 | 227,342 | 3 | 318 | 103,006 | 12,519 | 3,220 | 92,267 | | 1,115,324 | 1,093,073 | 22,251 | 1,334,685 | 38 |
| 22 | 8,934 | 7 | 1,413 | | | 3,618 | 659 | 231 | 2,288 | 440 | 34,486 | 33,541 | 945 | 54,545 | 39 |
| 22 | 6,017 | | | | | 446 | | 121 | 325 | | 3,847 | 3,437 | 410 | 21,540 | 40 |
| 68 | 31,225 | | | | | 10,691 | 1,000 | 837 | 8,307 | | 300,162 | 297,371 | 2,791 | 365,099 | 41 |
| 182 | 57,257 | | | | | 9,367 | 10 | 841 | 8,616 | | 95,552 | 50,440 | 45,112 | 207,524 | 42 |
| 2 | 430 | | | | | 632 | 427 | 12 | 193 | | 1,036 | 924 | 112 | 4,643 | 43 |
| 11 | 3,808 | | | | | 2,186 | 1,254 | 134 | 798 | | 14,894 | 14,691 | 103 | 31,177 | 44 |
| 3,486 | 1,166,227 | 99 | 13,411 | 40 | 5,236 | 176,026 | 9,444 | 40,001 | 126,581 | | 3,377,131 | 3,376,536 | 595 | 6,131,808 | 45 |
| 794 | 297,819 | 14 | 2,470 | 6 | 926 | 121,913 | 2,385 | 6,264 | 100,644 | 12,620 | 1,856,136 | 1,847,619 | 8,517 | 2,598,581 | 46 |
| 7 | 2,880 | | | | | 474 | 98 | 45 | 331 | | 12,882 | 12,627 | 255 | 26,708 | 47 |
| 1,773 | 912,614 | | | | | 183,696 | 5,915 | 22,896 | 145,460 | 9,425 | 805,476 | 776,375 | 29,101 | 2,484,551 | 48 |
| 159 | 75,959 | | | | | 13,412 | 315 | 330 | 347 | 12,420 | 44,736 | 44,500 | 236 | 175,186 | 49 |
| 2 | 1,335 | 173 | 43,523 | 1 | 75 | 30,000 | 21,452 | 1,358 | 7,190 | | 211,755 | 208,928 | 2,827 | 404,676 | 50 |
| 26 | 11,776 | 1 | 300 | 1 | 95 | 3,703 | 1,180 | 373 | 2,150 | | 45,333 | 44,811 | 572 | 104,565 | 51 |

TABLE 6.—MANUFACTURES BY

| MANUFACTURING AND MECHANICAL INDUSTRIES, AND CITIES AND TOWNS. | Number of establishments. | CAPITAL. | | | | | Proprietors and firm members. | SALARIED OFFICIALS, CLERKS, ETC. | | AVERAGE NUMBER OF WAGE-EARNERS AND TOTAL WAGES. | |
|--|---------------------------|-------------|-----------|------------|------------------------------------|--------------------|-------------------------------|----------------------------------|-----------|---|-------------|
| | | Total. | Land. | Buildings. | Machinery, tools, and imple-ments. | Cash and sundries. | | Number. | Salaries. | Total. | |
| | | | | | | | | | | Average number. | Wages. |
| 52 Monuments and tombstones ----- | 268 | \$1,844,015 | \$142,400 | \$193,561 | \$428,905 | \$1,079,149 | 450 | 86 | \$73,291 | 2,974 | \$1,773,103 |
| 53 Painting, house, sign, etc. ----- | 90 | 76,414 | 7,690 | 18,965 | 13,095 | 35,664 | 99 | | | 226 | 108,701 |
| 54 Paper and wood pulp ----- | 27 | 4,853,806 | 1,162,959 | 997,646 | 1,378,484 | 1,314,717 | 16 | 88 | 129,498 | 1,216 | 571,018 |
| 55 Patent medicines and compounds ----- | 24 | 758,291 | 29,575 | 108,450 | 74,405 | 550,861 | 26 | 98 | 160,482 | 279 | 110,150 |
| 56 Paving and paving materials ----- | 3 | 13,489 | 2,500 | 700 | 4,430 | 4,809 | 3 | | | 23 | 10,280 |
| 57 Photography ----- | 70 | 110,461 | 8,800 | 27,725 | 48,839 | 25,097 | 72 | | | 35 | 12,986 |
| 58 Pickles, preserves, and sauces ----- | 8 | 48,520 | 3,700 | 5,000 | 18,350 | 21,470 | 9 | 3 | 1,550 | 18 | 6,877 |
| 59 Plumbing, and gas and steam fitting ----- | 56 | 298,456 | 20,700 | 33,250 | 86,625 | 207,881 | 72 | 25 | 12,606 | 249 | 133,071 |
| 60 Printing and publishing, book and job ----- | 41 | 176,447 | 2,450 | 8,475 | 104,300 | 61,222 | 47 | 22 | 14,710 | 145 | 58,251 |
| 61 Printing and publishing, newspapers and periodicals ----- | 61 | 500,698 | 25,987 | 52,208 | 288,029 | 199,474 | 54 | 71 | 50,135 | 436 | 176,748 |
| 62 Roofing and roofing materials ----- | 23 | 545,914 | 123,790 | 57,360 | 131,155 | 233,609 | 87 | 89 | 26,310 | 1,604 | 542,086 |
| 63 Saddlery and harness ----- | 124 | 153,405 | 12,472 | 30,435 | 18,733 | 91,715 | 185 | 2 | 575 | 73 | 31,999 |
| 64 Shoddy ----- | 3 | 245,982 | 11,200 | 25,800 | 15,500 | 193,482 | 4 | 1 | 1,000 | 93 | 45,345 |
| 65 Soap and candles ----- | 7 | 23,280 | 5,050 | 11,600 | 5,675 | 5,955 | 7 | 1 | 1,000 | 12 | 4,550 |
| 66 Taxidermy ----- | 3 | 4,875 | 50 | 500 | 175 | 4,150 | 5 | | | | |
| 67 Tinsmithing, coppersmithing, and sheet-iron working ----- | 87 | 298,555 | 15,355 | 75,650 | 42,925 | 164,625 | 102 | 16 | 10,694 | 190 | 70,868 |
| 68 Tobacco, cigars and cigarettes ----- | 21 | 42,941 | 905 | 1,325 | 2,560 | 38,251 | 23 | 2 | 1,728 | 52 | 26,226 |
| 69 Tools, not elsewhere specified ----- | 5 | 27,254 | 510 | 1,040 | 8,384 | 17,320 | 6 | 3 | 1,800 | 14 | 8,180 |
| 70 Toys and games ----- | 3 | 95,880 | 3,125 | 26,500 | 21,815 | 44,440 | 4 | 9 | 7,954 | 121 | 52,027 |
| 71 Vinegar and cider ----- | 26 | 23,885 | 7,055 | 11,570 | 11,570 | 3,865 | 26 | | | 9 | 2,460 |
| 72 Watch, clock, and jewelry repairing ----- | 91 | 106,541 | 6,950 | 14,900 | 85,003 | 49,688 | 104 | | | 49 | 28,591 |
| 73 Wirework, including wire rope and cable ----- | 3 | 60,105 | 10,400 | 11,200 | 14,005 | 24,500 | 4 | 2 | 6,500 | 38 | 13,660 |
| 74 Wood, turned and carved ----- | 25 | 251,840 | 10,175 | 30,865 | 48,750 | 162,050 | 82 | 9 | 9,250 | 265 | 89,646 |
| 75 Woodenware, not elsewhere specified ----- | 6 | 41,254 | 3,200 | 9,600 | 14,300 | 14,154 | 7 | 2 | 1,200 | 51 | 15,792 |
| 76 Woolen goods ----- | 23 | 3,001,347 | 133,625 | 473,114 | 781,290 | 1,663,318 | 21 | 51 | 70,908 | 1,484 | 577,249 |
| 77 All other industries ----- | 62 | 6,315,794 | 376,046 | 1,096,026 | 1,221,836 | 3,621,886 | 44 | 187 | 209,755 | 2,767 | 1,176,887 |

¹ Embraces boxes, cigar, 1; boxes, fancy and paper, 2; brass castings and brass finishing, 1; carriage and wagon materials, 1; carriages and sleds, children's, 2; cars and general shop construction and repairs by street railroad companies, 1; chemicals, 2; clocks, 2; coffee and spice, roasting and grinding, 2; coffins, burial cases, and undertakers' goods, 2; cutlery and edge tools, 1; electroplating, 1; explosives, 1; grease and tallow, 1; hardware, saddlery, 1; hones and whetstones, 1; instruments, professional and scientific, 1; iron and steel, nails and spikes, cut and wrought, including wire nails, 1; ironwork, architectural and ornamental, 1;

TABLE 7.—MANUFACTURES IN CITIES AND

| 1 | Total for cities and towns ----- | 1,617 | \$26,351,298 | \$2,462,445 | \$4,134,913 | \$6,172,746 | \$13,591,194 | 1,855 | 1,161 | \$1,137,306 | 17,617 | \$7,665,220 | |
|----|----------------------------------|-------|--------------|-------------|-------------|-------------|--------------|-------|-------|-------------|--------|-------------|--|
| 2 | Barre ----- | 239 | 1,343,544 | 95,100 | 140,340 | 329,512 | 778,592 | 366 | 55 | 47,724 | 2,123 | 1,315,790 | |
| 3 | Bennington ----- | 32 | 3,129,196 | 151,475 | 366,380 | 899,289 | 1,722,052 | 85 | 88 | 101,805 | 1,855 | 701,030 | |
| 4 | Brandon ----- | 61 | 205,645 | 36,880 | 28,540 | 58,849 | 81,376 | 69 | 11 | 5,414 | 239 | 83,472 | |
| 5 | Brattleboro ----- | 119 | 1,334,492 | 61,175 | 200,812 | 275,357 | 797,148 | 132 | 63 | 63,861 | 854 | 376,647 | |
| 6 | Burlington ----- | 196 | 5,066,377 | 308,512 | 727,437 | 1,137,553 | 2,892,875 | 199 | 243 | 301,689 | 2,794 | 1,008,188 | |
| 7 | Colchester ----- | 31 | 1,298,283 | 91,629 | 206,561 | 321,898 | 678,250 | 29 | 42 | 41,115 | 932 | 251,499 | |
| 8 | Derby ----- | 19 | 215,924 | 7,250 | 37,350 | 62,750 | 108,574 | 17 | 10 | 9,490 | 184 | 71,200 | |
| 9 | Fair Haven ----- | 62 | 381,736 | 86,038 | 72,756 | 102,238 | 120,704 | 77 | 12 | 7,805 | 346 | 137,056 | |
| 10 | Lyndon ----- | 38 | 159,129 | 17,250 | 51,500 | 15,859 | 74,520 | 42 | 39 | 18,424 | 71 | 20,501 | |
| 11 | Montpelier ----- | 121 | 950,624 | 80,100 | 98,400 | 264,268 | 512,856 | 158 | 57 | 53,433 | 1,019 | 510,450 | |
| 12 | Newport ----- | 23 | 203,836 | 12,100 | 32,523 | 70,813 | 177,900 | 34 | 12 | 16,016 | 245 | 84,837 | |
| 13 | Northfield ----- | 56 | 356,110 | 26,345 | 51,891 | 81,675 | 150,199 | 64 | 11 | 9,100 | 276 | 112,263 | |
| 14 | Poultney ----- | 49 | 437,656 | 119,425 | 66,275 | 85,090 | 166,866 | 58 | 9 | 7,530 | 349 | 112,689 | |
| 15 | Proctor ----- | 5 | 2,465 | 450 | 810 | 305 | 900 | 5 | | | 2 | 625 | |
| 16 | Rockingham ----- | 53 | 604,902 | 15,170 | 77,053 | 208,053 | 364,626 | 65 | 47 | 33,920 | 359 | 163,457 | |
| 17 | Rutland ----- | 186 | 2,112,530 | 200,374 | 328,996 | 421,285 | 1,161,875 | 207 | 189 | 103,563 | 1,791 | 778,804 | |
| 18 | St. Albans ----- | 79 | 1,192,735 | 97,252 | 202,097 | 488,869 | 404,517 | 76 | 95 | 78,499 | 1,178 | 519,292 | |
| 19 | St. Johnsbury ----- | 89 | 3,790,028 | 220,875 | 735,804 | 731,234 | 2,102,115 | 91 | 96 | 93,105 | 1,195 | 568,619 | |
| 20 | Springfield ----- | 46 | 985,856 | 77,420 | 128,488 | 174,993 | 604,450 | 40 | 38 | 47,602 | 602 | 286,195 | |
| 21 | Swanton ----- | 46 | 305,698 | 54,225 | 50,650 | 66,385 | 185,437 | 55 | 27 | 17,286 | 259 | 80,546 | |
| 22 | West Rutland ----- | 17 | 2,134,582 | 703,500 | 545,250 | 376,470 | 509,362 | 16 | 67 | 74,925 | 944 | 487,560 | |

SPECIFIED INDUSTRIES: 1900—Continued.

| AVERAGE NUMBER OF WAGE-EARNERS AND TOTAL WAGES—continued. | | | | | | MISCELLANEOUS EXPENSES. | | | | | COST OF MATERIALS USED. | | | Value of products, including custom work and repairing. | |
|---|-------------|---------------------------|----------|---------------------------|--------|-------------------------|----------------|--|---------------------------------|----------------|-------------------------|---|----------------------------------|---|----|
| Men, 16 years and over. | | Women, 16 years and over. | | Children, under 16 years. | | Total. | Rent of works. | Taxes, not including internal revenue. | Rent of offices, interest, etc. | Contract work. | Total. | Principal materials, including mill supplies and freight. | Fuel and rent of power and heat. | | |
| Average number. | Wages. | Average number. | Wages. | Average number. | Wages. | | | | | | | | | | |
| 2,971 | \$1,772,565 | | | 8 | \$588 | \$268,891 | \$29,625 | \$7,652 | \$125,524 | \$105,590 | \$1,143,008 | \$1,075,342 | \$67,666 | \$4,045,611 | 52 |
| 226 | 108,701 | | | | | 6,505 | 8,369 | 382 | 2,804 | | 81,464 | 80,811 | 1,158 | 266,177 | 53 |
| 1,129 | 545,066 | 86 | \$25,794 | 1 | 158 | 265,569 | 975 | 26,806 | 237,813 | 975 | 1,684,922 | 1,477,658 | 207,264 | 3,384,773 | 54 |
| 124 | 69,991 | 154 | 39,994 | 1 | 165 | 806,360 | 2,284 | 6,137 | 797,404 | 1,585 | 690,610 | 635,634 | 4,976 | 2,125,016 | 55 |
| 28 | 10,280 | | | | | 1,989 | 70 | 79 | 1,840 | | 10,126 | 9,136 | 990 | 27,854 | 56 |
| 19 | 7,052 | 16 | 5,884 | | | 12,458 | 7,626 | 460 | 4,022 | 350 | 87,068 | 35,814 | 1,754 | 123,154 | 57 |
| 18 | 5,077 | 5 | 1,800 | | | 1,933 | 705 | 203 | 1,025 | | 25,717 | 24,586 | 1,131 | 43,808 | 58 |
| 247 | 182,636 | 1 | 260 | 1 | 175 | 17,499 | 7,599 | 1,942 | 7,958 | | 310,278 | 306,901 | 3,377 | 603,861 | 59 |
| 106 | 48,848 | 86 | 8,913 | 3 | 490 | 16,696 | 6,797 | 798 | 8,301 | 800 | 72,967 | 68,914 | 4,058 | 230,120 | 60 |
| 280 | 183,532 | 144 | 41,445 | 12 | 1,771 | 58,113 | 9,717 | 2,783 | 32,013 | 8,600 | 115,285 | 106,209 | 9,076 | 546,991 | 61 |
| 1,596 | 540,756 | | | 8 | 1,330 | 33,916 | 19,360 | 1,646 | 12,910 | | 175,196 | 121,003 | 54,193 | 907,744 | 62 |
| 73 | 81,999 | | | | | 11,821 | 6,890 | 1,097 | 3,274 | 60 | 107,874 | 105,638 | 2,236 | 229,795 | 63 |
| 67 | 83,142 | 26 | 7,203 | | | 7,609 | | 1,168 | 6,441 | | 268,712 | 263,034 | 5,678 | 882,852 | 64 |
| 11 | 4,600 | | | 1 | 50 | 1,973 | 350 | 208 | 1,426 | | 10,141 | 9,426 | 715 | 26,110 | 65 |
| | | | | | | 255 | 205 | 5 | 45 | | 465 | 350 | 115 | 2,925 | 66 |
| 189 | 70,618 | 1 | 250 | | | 16,508 | 6,023 | 2,755 | 7,695 | 25 | 170,616 | 166,885 | 3,731 | 849,893 | 67 |
| 47 | 25,136 | 4 | 974 | 1 | 116 | 11,869 | 2,620 | 315 | 8,434 | | 30,700 | 30,218 | 482 | 36,223 | 68 |
| 14 | 8,180 | | | | | 1,062 | 400 | 102 | 560 | | 16,321 | 15,067 | 1,254 | 38,150 | 69 |
| 109 | 43,598 | 9 | 2,334 | 3 | 500 | 1,950 | 800 | 319 | 831 | | 49,355 | 49,150 | 799 | 152,638 | 70 |
| 9 | 2,460 | | | | | 441 | 150 | 144 | 147 | | 16,171 | 15,900 | 265 | 36,918 | 71 |
| 44 | 22,541 | 4 | 1,000 | 1 | 50 | 18,197 | 8,147 | 862 | 4,128 | 60 | 20,185 | 18,641 | 1,544 | 105,404 | 72 |
| 30 | 12,600 | 8 | 1,060 | | | 1,471 | | 329 | 1,142 | | 34,993 | 34,666 | 327 | 63,436 | 73 |
| 252 | 87,538 | 12 | 1,828 | 1 | 280 | 11,074 | 2,181 | 1,266 | 7,627 | | 182,839 | 129,216 | 3,623 | 305,425 | 74 |
| 46 | 14,732 | 5 | 1,060 | | | 2,102 | 860 | 214 | 1,528 | | 20,676 | 19,911 | 765 | 56,755 | 75 |
| 1,030 | 435,955 | 427 | 135,982 | 27 | 5,312 | 98,541 | 7,000 | 10,452 | 31,014 | 75 | 1,554,625 | 1,505,601 | 43,921 | 2,572,646 | 76 |
| 2,158 | 1,030,733 | 591 | 134,217 | 18 | 2,937 | 265,362 | 8,797 | 25,368 | 203,613 | 27,584 | 1,988,602 | 1,933,640 | 54,962 | 4,994,608 | 77 |

kindling wood, 1; lard, refined, 2; lasts, 2; mattresses and spring beds, 2; musical instruments, organs and materials, 2; musical instruments, pianos and materials, 1; needles and pins, 1; paints, 2; paper goods, not elsewhere specified, 2; paper hanging, 2; perfumery and cosmetics, 1; photographic materials, 1; pottery, terra cotta, and fire-clay products, 1; pumps, not including steam pumps, 1; refrigerators, 1; scales and balances, 2; sewing machine repairing, 1; ship and boat building, wooden, 2; shirts, 2; sporting goods, 2; sugar and molasses, refining, 1; surgical appliances, 1; window shades, 1; wool pulling, 2; worsted goods, 1.

TOWNS UNDER 20,000 IN POPULATION: 1900.

| | | | | | | | | | | | | | | | |
|--------|-------------|-------|-----------|-----|----------|-------------|-----------|-----------|-------------|-----------|--------------|--------------|-----------|--------------|----|
| 14,111 | \$6,776,287 | 3,886 | \$868,704 | 120 | \$20,229 | \$2,516,564 | \$209,020 | \$126,011 | \$1,962,591 | \$218,942 | \$14,779,810 | \$14,416,855 | \$362,955 | \$31,861,208 | 1 |
| 2,089 | 1,305,066 | 31 | 10,224 | 8 | 500 | 215,116 | 25,226 | 7,191 | 111,799 | 70,900 | 993,625 | 937,536 | 56,089 | 3,242,274 | 2 |
| 994 | 429,732 | 840 | 267,178 | 21 | 4,120 | 161,755 | 25,811 | 8,131 | 114,891 | 12,922 | 1,443,830 | 1,407,233 | 36,597 | 2,805,608 | 3 |
| 195 | 75,856 | 33 | 6,446 | 11 | 1,170 | 11,816 | 2,441 | 997 | 6,517 | 1,861 | 158,031 | 155,681 | 3,010 | 326,249 | 4 |
| 581 | 239,374 | 263 | 85,999 | 10 | 1,274 | 90,213 | 18,851 | 6,400 | 68,055 | 1,907 | 665,599 | 644,338 | 21,261 | 1,544,467 | 5 |
| 2,058 | 836,887 | 690 | 162,387 | 46 | 8,434 | 1,064,709 | 88,193 | 22,117 | 954,223 | 50,171 | 3,751,186 | 3,696,421 | 54,765 | 7,094,538 | 6 |
| 623 | 177,943 | 303 | 72,630 | 6 | 926 | 81,797 | 1,595 | 4,359 | 48,459 | 27,384 | 764,234 | 750,042 | 14,242 | 1,258,603 | 7 |
| 181 | 70,600 | | | 3 | 600 | 7,101 | 1,328 | 1,139 | 4,634 | | 351,220 | 350,196 | 1,024 | 531,402 | 8 |
| 303 | 128,097 | 41 | 8,500 | 2 | 459 | 13,391 | 2,778 | 1,628 | 6,330 | 2,155 | 213,330 | 204,439 | 8,891 | 438,858 | 9 |
| 54 | 17,038 | 16 | 3,323 | 1 | 135 | 24,352 | 1,913 | 1,034 | 21,055 | 300 | 91,049 | 90,093 | 956 | 221,200 | 10 |
| 919 | 485,566 | 99 | 24,534 | 1 | 350 | 66,065 | 17,779 | 5,971 | 37,435 | 4,380 | 614,969 | 591,509 | 23,460 | 1,591,958 | 11 |
| 184 | 73,279 | 54 | 10,661 | 7 | 397 | 19,504 | 2,097 | 1,263 | 16,144 | | 353,444 | 349,182 | 4,262 | 549,522 | 12 |
| 209 | 97,843 | 67 | 14,420 | | | 14,933 | 1,410 | 1,554 | 12,010 | | 339,433 | 333,950 | 5,483 | 561,673 | 13 |
| 343 | 111,719 | 6 | 970 | | | 11,789 | 4,065 | 903 | 6,271 | 550 | 190,564 | 181,442 | 9,122 | 405,379 | 14 |
| | | 2 | 625 | | | 125 | 75 | 19 | 31 | | 3,079 | 3,000 | 79 | 6,010 | 15 |
| 324 | 152,927 | 34 | 10,426 | 1 | 104 | 143,297 | 8,914 | 8,317 | 130,746 | 320 | 504,028 | 490,466 | 13,562 | 961,023 | 16 |
| 1,335 | 676,963 | 451 | 95,651 | 5 | 690 | 133,616 | 31,655 | 9,928 | 81,513 | 10,525 | 1,044,566 | 1,014,060 | 30,506 | 2,456,677 | 17 |
| 900 | 465,421 | 278 | 53,371 | | | 98,355 | 7,438 | 5,942 | 81,776 | 3,199 | 1,034,772 | 1,012,590 | 22,182 | 1,850,590 | 18 |
| 1,149 | 556,141 | 45 | 12,310 | 1 | 168 | 132,521 | 9,292 | 17,477 | 82,784 | 22,968 | 951,643 | 926,246 | 25,397 | 2,338,906 | 19 |
| 536 | 267,577 | 65 | 18,288 | 1 | 330 | 76,870 | 4,920 | 3,902 | 54,148 | 3,900 | 640,859 | 627,916 | 12,943 | 1,210,286 | 20 |
| 192 | 71,023 | 66 | 9,451 | 1 | 72 | 23,648 | 3,006 | 1,811 | 18,301 | | 295,193 | 276,881 | 18,312 | 480,601 | 21 |
| 942 | 487,235 | 2 | 325 | | | 125,541 | 233 | 15,853 | 109,455 | | 474,446 | 473,634 | 812 | 1,440,334 | 22 |

Twelfth Census of the United States.

CENSUS BULLETIN.

No. 113.

WASHINGTON, D. C.

November 20, 1901.

AGRICULTURE.

NEW HAMPSHIRE.

HON. WILLIAM R. MERRIAM,
Director of the Census.

SIR: I have the honor to transmit herewith, for publication in bulletin form, the statistics of agriculture for the state of New Hampshire, taken in accordance with the provisions of section 7 of the act of March 3, 1899. This section requires that—

The schedules relating to agriculture shall comprehend the following topics: Name of occupant of each farm, color of occupant, tenure, acreage, value of farm and improvements, acreage of different products, quantity and value of products, and number and value of live stock. All questions as to quantity and value of crops shall relate to the year ending December thirty-first next preceding the enumeration.

New Hampshire has a total land area of 9,005 square miles, of which 5,640 square miles, or 62.6 per cent, are included in farms. The surface of the southeastern portion of the state, extending about 25 miles inland from the coast, is level, with only occasional hills.

North and west of this region the valleys of the rivers, which flow from north to south, are separated by highlands, which grow more and more rugged above the central part of the state, and in the north develop into the forest-clad peaks and ridges of the White Mountains.

The soil along the coast and in the river valleys is very fertile, much of it being periodically enriched and renewed by alluvial deposits. Here are found some of

the finest meadow lands in the world. The soil of the highlands, when properly cared for, is fairly productive, but without skillful and energetic management its use for the cultivation of vegetables or cereals is not generally profitable. The northern part of the state, which includes the White Mountain region, with an area of over 1,300 square miles, has a rocky and unproductive soil, better adapted for grazing than for raising grain or vegetables.

A "farm," as defined by the Twelfth Census, includes all the land, under one management, used for raising crops and pasturing live stock, with the wood lots, swamps, meadows, etc., connected therewith. It also includes the house in which the farmer resides, and all other buildings used by him in connection with his farming operations.

The farms of New Hampshire, June 1, 1900, numbered 29,324, and had a value of \$70,124,360, of which amount \$34,625,600, or 49.4 per cent, represents the value of buildings, and \$35,498,760, or 50.6 per cent, the value of the land and improvements other than buildings. On the same date the value of farm implements and machinery was \$5,163,090, and of live stock, \$10,554,646. These values, added to that of farms, give the "total value of farm property," \$85,842,096.

The term "value of farm products," as used in this bulletin, has reference to the value of all crops and animal products, including the value of animals sold or

slaughtered. This valuation for 1899 was \$21,929,988, of which amount \$9,654,694, or 44.0 per cent, represents the value of products of the live-stock industry, and \$12,275,294, or 56.0 per cent, the value of crops, including forest products. Since 1890 there has been an increase in the value of farm products of \$8,168,938, or 59.4 per cent. A large part of this increase is doubtless due to a more detailed enumeration in 1900 than in 1890. Of the actual increase, the greater part has been in the products of market gardens, dairies, and poultry farms, while cereal production and the raising of live stock continue to decrease in importance.

The value of "net farm products" or the "gross farm income" is obtained by deducting from the value of farm products the value of the products fed to live stock on the farms of the producers. In 1899 the

reported value of products fed was \$6,010,910, leaving \$15,919,078 as the gross farm income. The percentage which this sum is of the "total value of farm property" is referred to in the text of the bulletin as the "percentage of income on investment." For New Hampshire in 1899 it was 18.5 per cent.

As no reports of expenditures for taxes, interest, insurance, feed for stock, and similar items have been obtained by any census, no statement of net farm income can be given.

Very respectfully,

L. G. Powers.

Chief Statistician for Agriculture.

AGRICULTURE IN NEW HAMPSHIRE

GENERAL STATISTICS.

NUMBER AND SIZE OF FARMS.

The following table gives, by decades since 1850, the number of farms, the total and average acreage, and the per cent of land improved.

TABLE 1.—FARMS AND FARM ACREAGE: 1850 TO 1900.

| YEAR. | Number of farms. | NUMBER OF ACRES IN FARMS. | | | | Per cent of farm land improved. |
|-----------|------------------|---------------------------|-----------|-------------|----------|---------------------------------|
| | | Total. | Improved. | Unimproved. | Average. | |
| 1900..... | 29,324 | 3,609,864 | 1,076,879 | 2,532,985 | 123.1 | 29.8 |
| 1890..... | 29,151 | 3,459,018 | 1,727,387 | 1,731,631 | 118.7 | 49.9 |
| 1880..... | 32,181 | 3,721,173 | 2,308,112 | 1,413,061 | 115.6 | 62.0 |
| 1870..... | 29,642 | 3,605,994 | 2,334,487 | 1,271,507 | 121.7 | 64.7 |
| 1860..... | 30,501 | 3,744,625 | 2,367,034 | 1,377,591 | 122.8 | 63.2 |
| 1850..... | 29,229 | 3,392,414 | 2,251,488 | 1,140,926 | 116.1 | 66.4 |

The number of farms has fluctuated slightly from decade to decade, and is now only 95 more than in 1850. A corresponding variation is shown in total farm acreage, which is at present only 6.4 per cent greater than it was fifty years ago. A marked change has taken place, however, in the relative areas of improved and unimproved land, the percentage of farm land improved having decreased from 66.4 in 1850 to 29.8 in 1900, while the unimproved area has increased in a corresponding degree. The constant decrease since 1860 in the acreage of improved land marks a gradual readjustment of farm methods to meet the growing competition of western agriculture. General farming and the extensive cultivation of hay and cereals have been gradually giving place to dairying, poultry raising, market gardening, and fruit growing—branches of agriculture which involve the intensive cultivation of small areas of the most fertile soil. These changes have led in many cases to the partial or complete abandonment of the cultivation of cereals, and to the classification of a large

acreage formerly used in their production as unimproved land.

FARM PROPERTY AND PRODUCTS.

The total value of farm property, and the values of farm land and improvements, implements and machinery, live stock, and farm products, are given in Table 2 for each census year, beginning with 1850.

TABLE 2.—VALUES OF FARM PROPERTY AND PRODUCTS: 1850 TO 1900.

| YEAR. | Total value of farm property. | Land, improvements, and buildings. | Implements and machinery. | Live stock. | Farm products. ¹ |
|-------------------------|-------------------------------|------------------------------------|---------------------------|--------------|-----------------------------|
| 1900..... | \$85,842,096 | \$70,124,360 | \$5,163,090 | \$10,554,646 | \$21,929,988 |
| 1890..... | 80,207,575 | 66,162,600 | 3,594,850 | 10,460,125 | 13,761,050 |
| 1880..... | 88,715,693 | 75,334,389 | 3,069,240 | 9,812,064 | 13,474,330 |
| 1870 ² | 99,295,801 | 80,589,313 | 3,459,948 | 15,246,545 | ³ 22,473,547 |
| 1860..... | 83,297,400 | 69,689,761 | 2,683,012 | 10,924,627 | |
| 1850..... | 66,432,023 | 55,245,997 | 2,314,125 | 8,871,901 | |

¹ For year preceding that designated.

² Values for 1870 were reported in depreciated currency. To reduce to specie basis of other figures they must be diminished one-fifth.

³ Includes betterments and additions to live stock.

Since 1850 the total value of farm property has increased \$19,410,073, and in the last decade, \$5,634,521. Of this amount \$3,961,760, or 70.3 per cent, represents the increase in the value of land and buildings; \$1,568,240, or 27.8 per cent, that of implements and machinery; and \$104,521, or 1.9 per cent, that of live stock. The value of the farm products of 1899 was 59.4 per cent greater than in 1889. A portion of this increase, and also of that noted in the case of implements and machinery, is doubtless the result of a more detailed enumeration of these items in 1900 than heretofore.

COUNTY STATISTICS OF AGRICULTURE.

Table 3 gives an exhibit of general agricultural statistics by counties:

TABLE 3.—NUMBER AND AREA OF FARMS, AND VALUES OF FARM PROPERTY, JUNE 1, 1900, VALUE OF PRODUCTS OF 1899 NOT FED TO LIVE STOCK, AND EXPENDITURES IN 1899 FOR LABOR AND FERTILIZERS, BY COUNTIES.

| COUNTIES. | NUMBER OF FARMS. | | ACRES IN FARMS. | | VALUES OF FARM PROPERTY. | | | | Value of products not fed to live stock. | EXPENDITURES. | |
|-----------------|------------------|-----------------|-----------------|-----------|---|--------------|---------------------------|--------------|--|---------------|--------------|
| | Total. | With buildings. | Total. | Improved. | Land and improvements (except buildings). | Buildings. | Implements and machinery. | Live stock. | | Labor. | Fertilizers. |
| The State..... | 29,324 | 28,795 | 3,609,864 | 1,076,879 | \$35,498,760 | \$34,625,600 | \$5,163,090 | \$10,554,646 | \$15,919,078 | \$2,304,520 | \$367,980 |
| Belknap..... | 1,864 | 1,817 | 206,049 | 60,278 | 2,043,090 | 1,916,360 | 310,640 | 602,771 | 885,939 | 111,110 | 18,460 |
| Carroll..... | 2,413 | 2,373 | 364,007 | 72,797 | 2,564,910 | 2,318,760 | 319,090 | 673,457 | 872,684 | 126,310 | 24,310 |
| Cheshire..... | 2,660 | 2,588 | 368,883 | 95,978 | 3,515,220 | 3,489,710 | 491,290 | 1,011,725 | 1,573,267 | 228,960 | 35,750 |
| Coos..... | 1,895 | 1,861 | 329,066 | 124,786 | 2,484,490 | 2,180,300 | 393,380 | 1,048,992 | 1,207,845 | 193,140 | 26,730 |
| Grafton..... | 4,173 | 4,070 | 619,988 | 222,367 | 4,565,100 | 4,426,570 | 797,980 | 1,832,960 | 2,577,380 | 346,180 | 57,080 |
| Hillsboro..... | 4,137 | 4,058 | 454,214 | 145,000 | 5,700,580 | 5,405,960 | 761,180 | 1,498,008 | 2,407,471 | 387,440 | 65,750 |
| Merrimack..... | 3,893 | 3,815 | 476,794 | 125,588 | 4,771,850 | 4,346,470 | 657,020 | 1,314,613 | 2,168,000 | 271,710 | 48,800 |
| Rockingham..... | 4,240 | 4,195 | 331,450 | 102,058 | 5,632,800 | 6,211,580 | 772,390 | 1,236,791 | 2,194,638 | 371,310 | 41,630 |
| Strafford..... | 2,216 | 2,216 | 197,039 | 65,305 | 2,488,290 | 2,568,910 | 348,730 | 617,692 | 1,109,461 | 144,360 | 23,690 |
| Sullivan..... | 1,833 | 1,802 | 262,324 | 62,722 | 1,732,430 | 1,760,980 | 311,390 | 722,637 | 922,393 | 124,000 | 20,780 |

The number of farms in the state was 173 greater, June 1, 1900, than ten years before. Increases were reported in six counties, ranging from less than 1 per cent in Carroll, Cheshire, and Coos counties, to 6.6 per cent in Hillsboro county, 8.5 per cent in Belknap county, and 23.2 per cent in Strafford county. The counties having fewer farms than in 1890 were Merrimack, Rockingham, Grafton, and Sullivan, the decreases having been 2.2 per cent, 3.7 per cent, 4.9 per cent, and 9.8 per cent, respectively.

The portion of the land surface of each county included in farms ranged from 28.4 per cent in Coos county to 81.3 per cent in Hillsboro county, and the average size of farms from 78.2 acres in Rockingham to 173.6 in Coos.

The decrease since 1890 in total area of improved land, shown in Table 1, was distributed among all the counties. The greatest percentages of decrease were in Sullivan, Belknap, and Rockingham counties in the order named, and the smallest percentage was in Strafford county.

The value of farms decreased in Sullivan, Belknap, and Rockingham counties, the loss having been greatest in Rockingham, where it amounted to 7.6 per cent. This county has the most highly improved farms, and is the only county in which the value of farm buildings exceeds, to any considerable degree, the value of the land and other improvements.

The total value of live stock was 1.0 per cent greater in 1900 than in 1890. There was a decrease in Rockingham county of 14.9 per cent, the loss having been due principally to a decrease in the number of sheep, swine, and poultry. A decrease of 9.6 per cent in Sullivan county was distributed among all classes of live stock. The largest relative increases were reported by Strafford, Hillsboro, and Coos counties.

The increase in the valuation of implements and machinery was general, ranging from 27.2 per cent in Merrimack county to 58.3 per cent in Carroll county. A more complete enumeration in 1900 than heretofore is believed to explain a large part of this gain. The percentage of gross farm income varied from 14.9 in Carroll county to 22.2 in Grafton county.

The average expenditure per farm for labor, including the value of board furnished, was \$79 for the state, and varied from \$52 in Carroll county to \$102 in Coos county.

The average expenditure per farm for fertilizers increased from \$8.45 in 1890 to \$12.55 in 1900. The relative increase was greatest in Coos county, where it amounted to 120.0 per cent, and least in Cheshire, where it was only 19.5 per cent. In the decade from 1880 to 1890, also, Coos county showed the greatest relative increase, and the expenditure for fertilizers in that county was nearly five times as great in 1899 as in 1879. The very general use of commercial fertilizers in recent years in connection with the raising of cereals and

potatoes, both grown extensively in Coos county, accounts for this somewhat remarkable increase. The average expenditure per farm for fertilizers in 1899 was highest in Hillsboro county, where it amounted to \$15.89, and lowest in Belknap, Carroll, and Rockingham counties, in each of which it was approximately \$10.

FARMS CLASSIFIED BY RACE OF FARMER AND BY TENURE.

Table 4 gives a comparative exhibit of farm tenure for 1880, 1890, and 1900. In Table 5 the tenure of farms for 1900 is given by race of farmer. The farms classified in Table 4 as "farms operated by owners," are subdivided in Table 5 into groups, designated as "owners," "part owners," "owners and tenants," and "managers." These terms denote, respectively: (1) Farms operated by individuals who own all the land they cultivate; (2) farms operated by individuals who own a part of the land and rent the remainder from others; (3) farms operated under the joint direction and by the united labor of two or more individuals, one owning the farm or a part of it, and the other, or others, owning no part, but receiving for supervision or labor a share of the products; and (4) farms operated by individuals who receive for their supervision and other services a fixed salary from the owners.

TABLE 4.—NUMBER AND PER CENT OF FARMS OF SPECIFIED TENURES: 1880 TO 1900.

| YEAR. | Total number of farms. | NUMBER OF FARMS OPERATED BY— | | | PER CENT OF FARMS OPERATED BY— | | |
|-----------|------------------------|------------------------------|---------------|----------------|--------------------------------|---------------|----------------|
| | | Owners. ¹ | Cash tenants. | Share tenants. | Owners. ¹ | Cash tenants. | Share tenants. |
| 1900..... | 29,324 | 27,139 | 1,639 | 546 | 92.5 | 5.6 | 1.9 |
| 1890..... | 29,151 | 26,827 | 1,911 | 1,013 | 92.0 | 4.5 | 3.5 |
| 1880..... | 32,181 | 29,566 | 1,237 | 1,378 | 91.9 | 3.8 | 4.3 |

¹Including "part owners," "owners and tenants," and "managers."

TABLE 5.—NUMBER OF FARMS, CLASSIFIED BY RACE OF FARMER AND BY TENURE, JUNE 1, 1900.

| RACE. | Total number of farms. | Owners. | Part owners. | Owners and tenants. | Managers. | Cash tenants. | Share tenants. |
|--------------|------------------------|---------|--------------|---------------------|-----------|---------------|----------------|
| The State. | 29,324 | 25,775 | 569 | 106 | 689 | 1,639 | 546 |
| White..... | 29,314 | 25,768 | 568 | 106 | 689 | 1,637 | 546 |
| Colored..... | 10 | 7 | 1 | | | 2 | |

Since 1880 the number of farms operated by owners has decreased 2,427, or 8.2 per cent, and the number operated by tenants, 430, or 16.4 per cent. The per cent of farms operated by owners is slightly greater than in 1880. The decrease in the number of tenant-operated farms was entirely in the share-tenant class, the number of cash tenants being 402 greater in 1900 than in 1880. In 1880, 52.7 per cent of all tenants were share tenants; in 1890, 43.6 per cent; and in 1900, but 25.0 per cent. This somewhat remarkable change in

the relative number of cash tenants and share tenants is the result of a growing sentiment on the part of both landlord and tenant in favor of the cash-payment system, and indicates greater independence and financial responsibility on the part of the tenant class as a whole. Considered as evidence of agricultural progress, the significance of this change is enhanced by the fact that the greatest relative numbers of share tenants are found in the most recently developed and least improved sections of the state. In Coos county, 43.9 per cent of all tenants are share tenants, while in Rockingham county the corresponding per cent is but 16.2.

No previous census has reported the number of farms operated by "part owners," "owners and tenants," or "managers," but it is believed that the number of farms conducted by the last-named class is constantly increasing.

OWNERSHIP OF RENTED FARMS.

The ownership of 1,998 of the 2,185 rented farms in New Hampshire was ascertained by the enumerators; that of 187 was unreported. Titles to the 1,998 rented farms were vested in 1,933 owners, an average of approximately 103 farms to every 100 owners. Of the 1,933 owners, 1,887 possess 1 farm each. The others hold titles to from 2 to 8 farms each, as follows: 34, 2; 9, 3; 2, 4; and 1, 8. Of the 1,933 owners, 1,555, possessing 4,615 farms, reside in New Hampshire. The owners of 1,409 of these farms reside in the same counties in which their farms are located. Of the nonresident owners, 342 reside in the North Atlantic states, 15 in the North Central states, 10 in the Western states, 7 in the South Atlantic states, 3 in foreign countries, and 1 resides in a South Central state. The total value of the 383 farms owned by nonresidents, of whom only 5 own more than 1 farm, is \$881,783, or an average of \$2,302. This small average, when taken in connection with the fact that only 1 farm in 77 is owned by a nonresident, shows how groundless, so far as New Hampshire is concerned, is the popular belief that there is a large and growing class of nonresident landlords supported in luxury by rentals.

Of the rented farms of the state, 7 were worth \$25,000 and over, with an aggregate value of \$248,000, or an average of \$35,429; 32 were worth \$10,000 and less than \$25,000, with an aggregate value of \$428,500, or an average of \$13,391; and 2,146 were worth less than \$10,000, with an aggregate value of \$3,810,460, or an average of \$1,776. It follows that very few persons are supported wholly or even mainly by the rentals of New Hampshire farms.

FARM AREA, PROPERTY, AND PRODUCTS, CLASSIFIED BY RACE OF FARMER AND BY TENURE.

Table 6 gives the number and area of farms, and the value of property on farms operated by white and colored farmers, respectively, and also the same items for

farms classified by tenure. Table 7, with the same classification of farms, gives the average values of the several forms of farm property, and of the products not fed to live stock, together with the percentage of gross income upon total investment.

TABLE 6.—NUMBER AND AREA OF FARMS, AND VALUE OF FARM PROPERTY, JUNE 1, 1900, CLASSIFIED BY RACE OF FARMER AND BY TENURE, WITH PERCENTAGES.

| RACE OF FARMER, AND TENURE. | Number of farms. | NUMBER OF ACRES IN FARMS. | | | VALUE OF FARM PROPERTY. | |
|-----------------------------|------------------|---------------------------|-----------|------------------|-------------------------|------------------|
| | | Average. | Total. | Per cent. | Total. | Per cent. |
| The State..... | 29,321 | 123.1 | 3,609,864 | 100.0 | \$85,842,996 | 100.0 |
| White farmers..... | 29,314 | 123.1 | 3,609,302 | 100.0 | 85,829,476 | 100.0 |
| Colored farmers..... | 10 | 56.2 | 562 | (¹) | 12,620 | (¹) |
| Owners..... | 25,775 | 118.2 | 3,047,360 | 84.4 | 72,028,544 | 83.9 |
| Part owners..... | 569 | 210.5 | 119,770 | 3.3 | 2,384,928 | 2.8 |
| Owners and tenants..... | 106 | 181.9 | 19,283 | 0.5 | 390,892 | 0.5 |
| Managers..... | 689 | 245.7 | 169,308 | 4.7 | 5,011,440 | 6.5 |
| Cash tenants..... | 1,639 | 111.5 | 182,695 | 5.1 | 4,064,740 | 4.7 |
| Share tenants..... | 546 | 130.9 | 71,448 | 2.0 | 1,366,552 | 1.6 |

¹ Less than one-tenth of 1 per cent.

TABLE 7.—AVERAGE VALUES OF FARM PROPERTY AND PRODUCTS, CLASSIFIED BY RACE OF FARMER AND BY TENURE.

| RACE OF FARMER, AND TENURE. | AVERAGE VALUES PER FARM OF— | | | | Gross income (products of 1899 not fed to live stock). | Per cent of gross income on total investment in farm property. |
|-----------------------------|---|------------|---------------------------|-------------|--|--|
| | Farm property, June 1, 1900. | | | | | |
| | Land and improvements (except buildings). | Buildings. | Implements and machinery. | Live stock. | | |
| The State..... | \$1,210 | \$1,181 | \$176 | \$360 | \$543 | 18.5 |
| White farmers..... | 1,211 | 1,181 | 176 | 360 | 543 | 18.5 |
| Colored farmers..... | 474 | 635 | 85 | 168 | 272 | 21.6 |
| Owners..... | 1,137 | 1,136 | 173 | 348 | 534 | 19.1 |
| Part owners..... | 1,741 | 1,589 | 281 | 580 | 841 | 20.1 |
| Owners and tenants..... | 1,390 | 1,419 | 209 | 580 | 771 | 20.9 |
| Managers..... | 3,394 | 3,162 | 352 | 736 | 889 | 10.9 |
| Cash tenants..... | 1,122 | 952 | 119 | 287 | 428 | 17.2 |
| Share tenants..... | 982 | 1,010 | 143 | 368 | 507 | 20.2 |

The value of the farms owned by negroes, including implements, machinery, and live stock, together with the value of the implements, machinery, and live stock upon the farms which other negroes operate as tenants, is \$11,520. This amount is probably somewhat in excess of the actual wealth of the negro farmers of New Hampshire.

Farms conducted by managers have the largest average area, 245.7 acres, and those operated by cash tenants the smallest, 111.5 acres. Of the 164 farms each containing 1,000 acres or over, 121 are operated by "owners," 9 by "part owners," 23 by "managers," 8 by "cash tenants," and 3 by "share tenants."

Many of the farms operated by managers are adjuncts of public institutions, while others are conducted

for wealthy individuals in connection with their summer homes. These farms are, as a rule, favorably located and highly improved, and their average values, shown in Table 7, are much larger than those for any other class of farms grouped by tenure. The ratio which the gross income of these farms bears to the total value of the farm property is, however, smaller than for the other groups. This is due to the high average valuation above noted and to the fact that very few of these farms are cultivated for profit.

FARMS CLASSIFIED BY AREA.

For farms classified by area, Tables 8 and 9 give the facts shown in Tables 6 and 7 for farms classified by race of farmer and by tenure.

TABLE 8.—NUMBER AND AREA OF FARMS, AND VALUE OF FARM PROPERTY, JUNE 1, 1900, CLASSIFIED BY AREA, WITH PERCENTAGES.

| AREA. | Number of farms. | NUMBER OF ACRES IN FARMS. | | | VALUE OF FARM PROPERTY. | |
|-------------------------|------------------|---------------------------|-----------|-----------|-------------------------|-----------|
| | | Average. | Total. | Per cent. | Total. | Per cent. |
| The State..... | 29,324 | 123.1 | 3,609,864 | 100.0 | \$85,842,096 | 100.0 |
| Under 3 acres..... | 369 | 2.6 | 970 | (1) | 489,818 | 0.6 |
| 3 to 9 acres..... | 1,703 | 6.9 | 11,803 | 0.3 | 2,611,300 | 3.0 |
| 10 to 19 acres..... | 1,927 | 14.3 | 27,599 | 0.8 | 3,367,156 | 3.9 |
| 20 to 49 acres..... | 4,765 | 34.2 | 163,050 | 4.5 | 9,210,789 | 10.7 |
| 50 to 99 acres..... | 7,123 | 70.6 | 503,049 | 13.9 | 15,745,632 | 18.4 |
| 100 to 174 acres..... | 7,430 | 125.9 | 935,586 | 25.9 | 21,470,861 | 25.0 |
| 175 to 259 acres..... | 3,298 | 208.5 | 687,545 | 19.1 | 13,413,867 | 15.6 |
| 260 to 499 acres..... | 2,035 | 335.1 | 681,856 | 18.9 | 11,607,709 | 13.5 |
| 500 to 999 acres..... | 510 | 605.4 | 308,766 | 8.6 | 4,760,219 | 5.6 |
| 1,000 acres and over .. | 164 | 1,766.7 | 289,739 | 8.0 | 3,166,250 | 3.7 |

¹ Less than one-tenth of 1 per cent.

TABLE 9.—AVERAGE VALUES OF FARM PROPERTY AND PRODUCTS, CLASSIFIED BY AREA.

| AREA. | AVERAGE VALUES PER FARM OF— | | | | | Per cent of gross income on total investment in farm property. |
|-------------------------|---|------------|---------------------------|-------------|--|--|
| | Farm property, June 1, 1900. | | | | Gross income (products of 1899 not fed to live stock). | |
| | Land and improvements (except buildings). | Buildings. | Implements and machinery. | Live stock. | | |
| The State..... | \$1,210 | \$1,181 | \$176 | \$300 | \$543 | 18.5 |
| Under 3 acres..... | 374 | 824 | 62 | 66 | 255 | 19.3 |
| 3 to 9 acres..... | 615 | 855 | 66 | 97 | 185 | 12.1 |
| 10 to 19 acres..... | 640 | 893 | 85 | 124 | 208 | 11.9 |
| 20 to 49 acres..... | 727 | 980 | 108 | 168 | 282 | 14.6 |
| 50 to 99 acres..... | 861 | 988 | 144 | 208 | 415 | 18.8 |
| 100 to 174 acres..... | 1,174 | 1,198 | 189 | 301 | 590 | 20.4 |
| 175 to 259 acres..... | 1,706 | 1,529 | 203 | 309 | 619 | 20.1 |
| 260 to 499 acres..... | 2,568 | 1,973 | 342 | 321 | 1,121 | 19.7 |
| 500 to 999 acres..... | 4,343 | 3,245 | 436 | 1,259 | 1,797 | 19.2 |
| 1,000 acres and over .. | 11,338 | 6,297 | 623 | 1,993 | 3,219 | 16.7 |

The largest of the groups classified by area is that of farms containing from 100 to 174 acres each. This group comprises also the largest percentage of the total

acreage, and of the total value of farm property, and shows the largest percentage of gross income upon investment.

The average values of farm property given in Table 9 are lowest for farms containing less than 3 acres, and rise in unbroken series to those containing 1,000 acres and over. Except for farms of less than 3 acres each, the average values of products not fed to live stock vary in the same manner. The average values per acre of such products for the various groups classified by area are as follows: Farms under 3 acres, \$97.23; 3 to 9 acres, \$26.72; 10 to 19 acres, \$14.54; 20 to 49 acres, \$8.23; 50 to 99 acres, \$5.88; 100 to 174 acres, \$4.68; 175 to 259 acres, \$3.93; 260 to 499 acres, \$3.35; 500 to 999 acres, \$2.97; and 1,000 acres and over, \$1.82. The large gross income per acre shown for farms under 3 acres is explained by the fact that this group includes 28 florists' establishments and 51 city dairies, which make use of valuable land having upon it very costly improvements, and that their operation requires a relatively large amount of labor, and in some cases, involves large expenditures for fertilizers and feed for live stock. The same conditions are true with respect to many farms containing from 3 to 10 acres each.

FARMS CLASSIFIED BY PRINCIPAL SOURCE OF INCOME.

Tables 10 and 11 present the leading facts concerning the number, area, value, and average value of farms, classified by principal source of income. If for any farm 40 per cent of the products not fed to live stock consists of hay and grain, the farm is designated a hay and grain farm. Should 40 per cent of the products consist of vegetables, the farm is designated a vegetable farm. The farms of the other groups are classified in the same manner. Farms with no income in 1889 are classified according to the agricultural operations upon other farms in the same locality.

TABLE 10.—NUMBER AND AREA OF FARMS, AND VALUE OF FARM PROPERTY, JUNE 1, 1900, CLASSIFIED BY PRINCIPAL SOURCE OF INCOME, WITH PERCENTAGES.

| PRINCIPAL SOURCE OF INCOME. | Number of farms. | NUMBER OF ACRES IN FARMS. | | | VALUE OF FARM PROPERTY. | |
|-----------------------------|------------------|---------------------------|-----------|-----------|-------------------------|-----------|
| | | Average. | Total. | Per cent. | Total. | Per cent. |
| The State..... | 29,324 | 123.1 | 3,609,864 | 100.0 | \$85,842,096 | 100.0 |
| Hay and grain..... | 3,547 | 106.9 | 379,085 | 10.5 | 8,499,202 | 9.9 |
| Vegetables..... | 1,505 | 74.7 | 112,424 | 3.1 | 3,647,920 | 4.2 |
| Fruit..... | 482 | 79.9 | 34,526 | 1.0 | 1,174,910 | 1.4 |
| Live stock..... | 7,634 | 105.3 | 803,508 | 22.3 | 19,064,461 | 22.2 |
| Dairy products..... | 9,788 | 132.3 | 1,294,967 | 35.9 | 33,862,433 | 39.5 |
| Tobacco..... | 30 | 140.9 | 4,227 | 0.1 | 147,750 | 0.2 |
| Sugar..... | 3 | 99.0 | 297 | (1) | 3,700 | (1) |
| Flowers and plants..... | 60 | 23.1 | 1,886 | (1) | 286,162 | 0.3 |
| Nursery products..... | 8 | 53.4 | 427 | (1) | 33,880 | (1) |
| Miscellaneous..... | 6,317 | 155.0 | 979,017 | 27.1 | 19,121,678 | 22.8 |

¹ Less than one-tenth of 1 per cent.

TABLE 11.—AVERAGE VALUES OF FARM PROPERTY AND PRODUCTS, CLASSIFIED BY PRINCIPAL SOURCE OF INCOME.

| PRINCIPAL SOURCE OF INCOME. | AVERAGE VALUES PER FARM OF— | | | | | Per cent of gross income on total investment in farm property. |
|-----------------------------|---|------------|---------------------------|-------------|--|--|
| | Farm property, June 1, 1900. | | | | Gross income (products of 1899 not fed to live stock). | |
| | Land and improvements (except buildings). | Buildings. | Implements and machinery. | Live stock. | | |
| The State..... | \$1,210 | \$1,181 | \$176 | \$360 | \$543 | 18.5 |
| Hay and grain..... | 1,182 | 1,043 | 79 | 92 | 225 | 9.4 |
| Vegetables..... | 981 | 1,057 | 158 | 228 | 844 | 14.2 |
| Fruit..... | 1,107 | 1,242 | 139 | 282 | 384 | 14.1 |
| Live stock..... | 968 | 1,019 | 162 | 348 | 460 | 18.4 |
| Dairy produce..... | 1,850 | 1,379 | 221 | 510 | 677 | 15.6 |
| Tobacco..... | 2,290 | 1,788 | 291 | 561 | 1,394 | 28.3 |
| Sugar..... | 483 | 617 | 66 | 117 | 180 | 14.6 |
| Flowers and plants..... | 2,119 | 2,314 | 234 | 102 | 2,047 | 42.9 |
| Nursery products..... | 1,875 | 2,125 | 194 | 41 | 814 | 19.2 |
| Miscellaneous..... | 1,351 | 1,167 | 183 | 386 | 658 | 21.6 |

The percentages of improved land in the farms of the various classes shown in Table 10 vary from 25 to 35, except for maple-sugar farms and florists' establishments, for which the percentages are 13.5 and 59.3, respectively.

For the several classes of farms the average values per acre of the products not fed to live stock are: Flowers and plants, \$88.63; nursery products, \$15.24; tobacco, \$9.89; dairy produce, \$5.12; fruit, \$4.81; vegetables, \$4.60; live stock, \$4.38; miscellaneous, \$4.22; hay and grain, \$2.10; and sugar, \$1.82. A comparison shows that the average gross income per acre is largest for the farms of smallest average area. It should be noted, however, that the small farms with relatively high incomes are devoted to those branches of agriculture which involve the greatest original investments, and which require in their operation the largest relative amount of labor and expense.

Of the 3,547 hay and grain farms, only 1,522, or 42.9 per cent, report any domestic animals, and many report no products except small quantities of hay or trifling crops of other kinds. These facts are evidence that many such farms were partially abandoned in 1899, and explain the relatively small per cent of gross income shown in Table 11 for this group.

FARMS CLASSIFIED BY REPORTED VALUE OF PRODUCTS NOT FED TO LIVE STOCK.

Tables 12 and 13 present data relating to farms classified by the reported value of products not fed to live stock.

TABLE 12.—NUMBER AND AREA OF FARMS, AND VALUE OF FARM PROPERTY, JUNE 1, 1900, CLASSIFIED BY REPORTED VALUE OF PRODUCTS NOT FED TO LIVE STOCK, WITH PERCENTAGES.

| VALUE OF PRODUCTS NOT FED TO LIVE STOCK. | Number of farms. | NUMBER OF ACRES IN FARMS. | | | VALUE OF FARM PROPERTY. | |
|--|------------------|---------------------------|-----------|-----------|-------------------------|-----------|
| | | Average. | Total. | Per cent. | Total. | Per cent. |
| The State..... | 29,324 | 123.1 | 3,609,864 | 100.0 | \$86,842,096 | 100.0 |
| \$0..... | 146 | 86.7 | 12,661 | 0.4 | 851,931 | 0.4 |
| \$1 to \$49..... | 1,305 | 40.0 | 52,198 | 1.4 | 1,578,324 | 1.8 |
| \$50 to \$99..... | 2,198 | 48.9 | 107,471 | 3.0 | 3,075,124 | 3.6 |
| \$100 to \$249..... | 7,372 | 68.8 | 506,832 | 14.0 | 12,586,269 | 14.7 |
| \$250 to \$499..... | 7,944 | 106.8 | 844,654 | 23.4 | 19,406,904 | 22.6 |
| \$500 to \$999..... | 6,477 | 158.8 | 1,028,800 | 28.5 | 22,907,661 | 26.7 |
| \$1,000 to \$2,499..... | 3,295 | 235.2 | 776,038 | 21.5 | 18,948,448 | 22.1 |
| \$2,500 and over..... | 587 | 480.8 | 282,210 | 7.8 | 6,992,450 | 8.1 |

TABLE 13.—AVERAGE VALUES OF FARM PROPERTY AND PRODUCTS, CLASSIFIED BY REPORTED VALUE OF PRODUCTS NOT FED TO LIVE STOCK.

| VALUE OF PRODUCTS NOT FED TO LIVE STOCK. | AVERAGE VALUES PER FARM OF— | | | | | Per cent of gross income on total investment in farm property. |
|--|---|------------|---------------------------|-------------|--|--|
| | Farm property, June 1, 1900. | | | | Gross income (products of 1899 not fed to live stock). | |
| | Land and improvements (except buildings). | Buildings. | Implements and machinery. | Live stock. | | |
| The State..... | \$1,210 | \$1,181 | \$176 | \$360 | \$543 | 18.5 |
| \$0..... | 1,046 | 1,050 | 110 | 196 | 31 | 2.8 |
| \$1 to \$49..... | 505 | 596 | 47 | 61 | 76 | 5.4 |
| \$50 to \$99..... | 569 | 698 | 57 | 80 | 162 | 9.5 |
| \$100 to \$249..... | 717 | 782 | 87 | 141 | 361 | 14.8 |
| \$250 to \$499..... | 984 | 1,028 | 152 | 279 | 696 | 19.7 |
| \$500 to \$999..... | 1,431 | 1,381 | 230 | 495 | 865 | 24.7 |
| \$1,000 to \$2,499..... | 2,365 | 2,147 | 373 | 865 | 1,423 | 35.0 |
| \$2,500 and over..... | 5,582 | 4,036 | 667 | 1,627 | 4,170 | 35.0 |

Of the farms of the state, 146, ranging in area from 3 to 1,000 acres, report no income. The average values of the land and improvements, buildings, implements and machinery, and live stock of these farms are relatively very high, exceeding in the first two cases those of farms with reported incomes from \$250 to \$499. This, and the fact that 117 of the farms of this class are operated by their owners, lead to the conclusion that many of them are summer homes or country estates held for pleasure, and not for the profit to be derived from operation. A considerable number of the 1,305 farms with reported incomes of less than \$50 each, probably belong to the above class, the only crops raised having been for home consumption. Some are farms that were partially abandoned in 1899, while others had changed owners or tenants, and the farmers in charge, June 1, 1900, were unable to give any definite

information concerning the products of the preceding year. To this extent the reports fall short of giving a complete exhibit of farm income in 1899.

With the exception of the group reporting no gross income, the average values of the several items of farm property increase with the value of products not fed to live stock. The percentages of gross income upon investments form a continuous upward series from the group with the smallest value of products to that with the largest.

CLASSIFICATION, NUMBER, AND VALUE OF LIVE STOCK.

At the request of the various live stock associations of the country, a new classification of domestic animals was adopted for the census of 1900. The age grouping for neat cattle was determined in accordance with their present and prospective relations to the dairy industry and the supply of meat products. Horses and mules are classified by age, and neat cattle and sheep by age and sex. The new classification permits a very close comparison with the figures obtained at preceding decennial periods.

Table 14 gives the number, value, and average value of the various classes of live stock on farms and the number of domestic animals not on farms.

TABLE 14.—NUMBER AND VALUE OF DOMESTIC ANIMALS, FOWLS, AND BEES, JUNE 1, 1900.

| LIVE STOCK. | Age in years. | ON FARMS. | | | NOT ON FARMS. |
|------------------------------------|---------------|-----------|------------|----------------|---------------|
| | | Number. | Value. | Average value. | |
| Calves | Under 1 | 40,484 | \$305,895 | \$7.57 | 327 |
| Steers | 1 and under 2 | 9,028 | 139,802 | 15.43 | 91 |
| Steers | 2 and under 3 | 6,997 | 178,283 | 25.48 | 50 |
| Steers | 3 and over | 7,571 | 418,250 | 54.58 | 68 |
| Bulls | 1 and over | 5,050 | 112,992 | 22.87 | 14 |
| Heifers | 1 and under 2 | 29,574 | 462,468 | 15.64 | 404 |
| Cows kept for milk | 2 and over | 115,086 | 3,615,354 | 31.42 | 3,715 |
| Cows and heifers not kept for milk | 2 and over | 13,102 | 819,086 | 24.85 | 410 |
| Colts | Under 1 | 702 | 23,847 | 33.97 | 71 |
| Horses | 1 and under 2 | 1,543 | 90,816 | 58.86 | 64 |
| Horses | 2 and over | 52,621 | 3,726,007 | 70.81 | 22,232 |
| Mule colts | Under 1 | 12 | 232 | 19.33 | |
| Mules | 1 and under 2 | 13 | 630 | 48.46 | |
| Mules | 2 and over | 72 | 5,210 | 72.36 | 30 |
| Asses and burros | All ages | 27 | 1,565 | 57.96 | 11 |
| Lambs | Under 1 | 89,795 | 92,525 | 2.33 | 254 |
| Sheep (ewes) | 1 and over | 61,205 | 201,388 | 3.29 | 325 |
| Sheep (rams and wethers) | 1 and over | 4,023 | 15,588 | 3.86 | 10 |
| Swine | All ages | 51,211 | 357,578 | 6.98 | 5,759 |
| Goats | All ages | 208 | 916 | 4.40 | 45 |
| Fowls: ¹ | | | | | |
| Chickens ² | | 870,461 | | | |
| Turkeys | | 2,386 | 467,104 | | |
| Geese | | 1,239 | | | |
| Ducks | | 3,803 | | | |
| Bees (swarms of) | | 5,520 | 24,665 | 4.47 | |
| Value of all live stock | | | 10,554,646 | | |

¹ The number reported is of fowls over 3 months old. The value is of all, old and young.

² Including Guinea fowls.

As in other New England states, the value of steers 3 years old and over is comparatively high, due to including in this class the valuable working oxen still used in certain districts. The number so employed is rapidly decreasing. In 1850, 59,027 working oxen were reported; in 1860, 51,512; in 1870, 40,513; in 1880,

29,152; in 1890, 23,648; while in 1900 the total number of steers over 2 years old was only 14,568, and it is probable that many of these were not working oxen.

In comparing the poultry report of 1900 with that of the Eleventh Census, it should be borne in mind that in 1900 the enumerators were instructed not to report fowls less than 3 months old, while in 1890 no such limitation was made. This fact explains, in part, the decrease in the number of all kinds of fowls. It is the opinion of poultry experts, however, that, owing to western competition and the difficulty of keeping stock free from disease, the raising of turkeys, geese, and ducks is being gradually abandoned. Compared with the figures for 1890, the present census shows decreases in the number of fowls as follows: Chickens, 6.6 per cent; turkeys, 76.6 per cent; geese, 53.9 per cent; ducks, 77.7 per cent.

The total value of all live stock on farms was \$10,554,646, of which 36.4 per cent represents the value of horses, 34.3 per cent that of dairy cows, 18.3 per cent that of other neat cattle, 4.4 per cent that of poultry, and 6.6 per cent that of all other live stock. No reports were secured of the value of live stock not on farms, but it is probable that such animals have higher average values than those on farms. Allowing the same averages, the total value of all live stock in the state, exclusive of poultry and bees not on farms, is substantially \$12,320,000.

CHANGES IN THE LIVE-STOCK INDUSTRY IN FIFTY YEARS.

The following table shows the progress of the live-stock industry since 1850:

TABLE 15.—NUMBER OF DAIRY COWS, OTHER NEAT CATTLE, HORSES, MULES AND ASSES, SHEEP, AND SWINE: 1850 TO 1900.

| YEAR. | Dairy cows. | Other neat cattle. | Horses. | Mules and asses. | Sheep. ¹ | Swine. |
|-------|-------------|--------------------|---------|------------------|---------------------|--------|
| 1900 | 115,086 | 111,756 | 54,866 | 124 | 65,818 | 51,211 |
| 1890 | 109,423 | 118,465 | 52,458 | 123 | 131,611 | 58,585 |
| 1880 | 90,564 | 141,841 | 46,773 | 87 | 211,825 | 53,437 |
| 1870 | 90,583 | 132,218 | 39,095 | 87 | 248,760 | 33,127 |
| 1860 | 94,880 | 169,587 | 41,101 | 10 | 310,534 | 51,985 |
| 1850 | 94,277 | 173,633 | 34,233 | 19 | 384,756 | 63,487 |

¹ Lambs not included.

Two significant movements since 1850 are the increase in the number of "dairy cows" and "horses" and the nearly constant decrease in the number of "other neat cattle" and "sheep." These changes are in keeping with two general phases of the revolution in the character of New England agriculture in the last half century. The farmer has met the demands of a rapidly growing urban population for dairy produce, vegetables, and fruit by keeping more cows and by devoting a larger portion of his time and capital to market gardening and to horticulture, which industries require

much new and improved machinery and consequently more horsepower. The decrease in the number of beef cattle, sheep, and swine is incident to the supplanting of oxen by horses and to the shifting of the meat-producing industry to the western states.

Since 1850 the number of dairy cows has increased 22.0 per cent, and in the last decade 6.0 per cent. The number reported in 1900 is exclusive of 13,102 "cows and heifers not kept for milk," most of which were doubtless milch cows dry at the time of enumeration. The number of calves reported in 1900 was 40,434. If calves were not included in the reports for previous census years, the decrease from 1890 to 1900 in the number of "other neat cattle" was relatively greater than in any preceding decade. The number of sheep reported in 1900 was 83.0 per cent less than in 1850, and 50.4 per cent less than in 1890. The decrease in the number of swine has been less marked, owing to the fact that these animals can be raised with profit in connection with dairy farms.

ANIMAL PRODUCTS.

The quantities and values of wool, mohair, dairy produce, and other animal products, including the value of fowls raised and animals sold and slaughtered for food, are given in Table 16.

TABLE 16.—QUANTITIES AND VALUES OF ANIMAL PRODUCTS, VALUE OF POULTRY RAISED, AND VALUES OF ANIMALS SOLD AND SLAUGHTERED ON FARMS: 1899.

| PRODUCTS. | Unit of measure. | Quantity. | Value. |
|---------------------------|------------------|--------------|-----------|
| Wool..... | Pounds..... | 402,360 | \$81,045 |
| Mohair and goat hair..... | Pounds..... | 30 | 9 |
| Milk..... | Gallons..... | 1 60,724,690 | 5,591,272 |
| Butter..... | Pounds..... | 6,385,611 | |
| Cheese..... | Pounds..... | 194,359 | 1,213,703 |
| Eggs..... | Dozens..... | 7,005,180 | |
| Poultry..... | | | 610,696 |
| Honey..... | Pounds..... | 89,200 | 17,686 |
| Wax..... | Pounds..... | 3,350 | |
| Animals sold..... | | | 1,345,941 |
| Animals slaughtered..... | | | 794,312 |
| Total..... | | | 9,654,694 |

¹Includes all milk produced.

The value of animal products in 1899 was \$9,654,694, or 44.0 per cent of the value of all farm products and 60.6 per cent of the gross farm income. Of the above amount, 57.9 per cent represents the value of dairy products; 22.2 per cent, that of animals sold and slaughtered; 18.9 per cent, that of poultry and eggs; and 1.0 per cent, that of wool, and honey and wax.

In no other branch of agriculture has there been such rapid development in the last decade as in dairying. The production of milk in 1899 was 18,091,322 gallons greater than in 1889, an increase of 42.4 per cent. It is significant that in the same period the quantities of

butter and cheese produced on farms decreased 19.6 per cent and 69.4 per cent, respectively. The gradual transfer of the production of these commodities from the farm to the creamery and cheese factory, and the fact that they are more open to western competition than are milk and cream, partially explain this decrease. A more important factor, perhaps, is the increased demand for milk and cream in cities, resulting in the widely adopted use of rapid transit milk trains.

Of the \$5,591,272 given in Table 16 as the value of all dairy products in 1899, \$1,092,698, or 19.5 per cent, represents the value of such products consumed on farms, and \$4,498,574, or 80.5 per cent, the amount realized from dairy produce sold. Of the latter sum, \$3,235,732 was derived from the sale of 28,988,306 gallons of milk; \$1,019,192, from 4,548,617 pounds of butter; \$233,913, from 552,916 gallons of cream; and \$9,737, from 77,057 pounds of cheese.

The production of wool has decreased steadily since 1860, and in 1899 it was 43.9 per cent less than ten years before. The average weight of fleeces in 1889 was 5.8 pounds, and in 1899, 6.1 pounds.

DISTRIBUTION OF HORSES AND DAIRY COWS ON FARMS BY SPECIFIED CLASSES.

Table 17 presents, for the leading groups of farms, the number of farms reporting horses and dairy cows, the total number for each group, and the average number per farm. In computing the averages presented, only those farms which report the kind of stock under consideration are included.

TABLE 17.—DISTRIBUTION OF HORSES AND DAIRY COWS, BY SPECIFIED CLASSES OF FARMS, JUNE 1, 1900.

| CLASSES. | HORSES. | | | DAIRY COWS. | | |
|----------------------------------|------------------|---------|-------------------|------------------|---------|-------------------|
| | Farms reporting. | Number. | Average per farm. | Farms reporting. | Number. | Average per farm. |
| Total..... | 24,156 | 54,806 | 2.3 | 22,519 | 115,036 | 5.1 |
| White farmers..... | 24,146 | 54,852 | 2.3 | 22,512 | 115,011 | 5.1 |
| Colored farmers..... | 10 | 14 | 1.4 | 7 | 25 | 3.6 |
| Owners ¹ | 21,892 | 48,741 | 2.2 | 20,569 | 103,414 | 5.0 |
| Managers..... | 513 | 2,419 | 4.7 | 478 | 3,942 | 8.2 |
| Cash tenants..... | 1,305 | 2,701 | 2.1 | 1,053 | 5,302 | 5.0 |
| Share tenants..... | 446 | 1,005 | 2.3 | 419 | 2,378 | 5.7 |
| Under 20 acres..... | 2,513 | 3,560 | 1.4 | 1,756 | 2,304 | 1.6 |
| 20 to 99 acres..... | 9,587 | 16,432 | 1.7 | 9,005 | 27,987 | 3.1 |
| 100 to 174 acres..... | 6,504 | 15,459 | 2.4 | 6,333 | 36,254 | 5.7 |
| 175 to 259 acres..... | 3,023 | 8,581 | 2.8 | 2,939 | 22,025 | 7.5 |
| 260 acres and over..... | 2,529 | 10,391 | 4.3 | 2,486 | 25,966 | 10.4 |
| Hay and grain..... | 1,310 | 2,512 | 1.9 | 724 | 1,840 | 2.5 |
| Vegetable..... | 1,214 | 2,783 | 2.3 | 693 | 2,302 | 3.4 |
| Fruit..... | 308 | 597 | 1.9 | 182 | 586 | 3.2 |
| Live stock..... | 6,649 | 14,111 | 2.1 | 5,307 | 20,467 | 3.5 |
| Dairy..... | 9,139 | 22,143 | 2.4 | 9,738 | 70,788 | 7.2 |
| Miscellaneous ² | 5,536 | 12,740 | 2.3 | 5,200 | 18,998 | 3.6 |

¹Including "part owners" and "owners and tenants"

²Including florists' establishments and nurseries.

ACREAGE AND PRODUCTION OF CROPS.

The following table gives the acreage, quantities, and values of the crops of 1899:

TABLE 18.—ACRES, QUANTITIES, AND VALUES OF VEGETABLE PRODUCTS: 1899.

| PRODUCTS. | Acres. | Unit of measure. | Quantity. | Value. |
|-------------------------------|------------------|------------------|-----------|----------------------|
| Corn..... | 25,694 | Bushels..... | 1,080,720 | \$538,788 |
| Wheat..... | 271 | Bushels..... | 4,035 | 3,428 |
| Oats..... | 12,589 | Bushels..... | 497,110 | 184,025 |
| Barley..... | 1,596 | Bushels..... | 46,680 | 26,189 |
| Rye..... | 350 | Bushels..... | 6,320 | 2,529 |
| Buckwheat..... | 1,835 | Bushels..... | 43,360 | 19,334 |
| Grass seed..... | | Bushels..... | 45 | 111 |
| Clover seed..... | | Bushels..... | 2 | 10 |
| Hay and forage..... | 615,042 | Tons..... | 654,973 | 6,336,252 |
| Miscellaneous..... | | | | 10,638 |
| Tobacco..... | 109 | Pounds..... | 181,644 | 27,920 |
| Dry beans..... | 2,892 | Bushels..... | 29,990 | 62,799 |
| Dry peas..... | 146 | Bushels..... | 1,538 | 2,210 |
| Potatoes..... | 19,422 | Bushels..... | 2,420,668 | 1,090,495 |
| Sweet potatoes..... | 1 | Bushels..... | 6 | 6 |
| Onions..... | 95 | Bushels..... | 28,004 | 15,747 |
| Miscellaneous vegetables..... | 7,262 | | | 611,524 |
| Maple sugar..... | | Pounds..... | 441,870 | 44,312 |
| Maple sirup..... | | Gallons..... | 41,588 | 38,314 |
| Small fruits..... | 734 | | | 116,830 |
| Grapes..... | 1325 | Centals..... | 13,083 | ² 14,462 |
| Orchard fruits..... | 152,109 | | | ³ 707,729 |
| Nuts..... | | | | 6,329 |
| Forest products..... | | | | 2,299,327 |
| Flowers and plants..... | 38 | | | 108,161 |
| Seeds..... | 3 | | | 855 |
| Nursery products..... | 34 | | | 7,012 |
| Hops..... | (⁴) | Pounds..... | 60 | 6 |
| Peanuts..... | (⁴) | Bushels..... | 2 | 2 |
| Total..... | 740,547 | | | 12,276,294 |

¹ Estimated from number of vines or trees.

² Including value of raisins, wine, etc.

³ Including value of cider and vinegar.

⁴ Less than 1 acre.

Of the total value of vegetable products, hay and forage contributed 51.6 per cent; cereals, 6.3 per cent; vegetables, including potatoes, sweet potatoes, and onions, 14.0 per cent; fruits and nuts, 6.9 per cent; forest products, 18.7 per cent; and all other products, 2.5 per cent.

Owing to more favorable climatic conditions in 1899, the yield per acre of most crops was greater than in 1889. The latter year was especially unfavorable to the growing of potatoes, the yield per acre having been but 86.8 bushels. In 1899 the yield was 124.6 bushels.

The average yield per acre of hay and forage was 1.1 tons, and the average values were \$9.67 per ton and \$10.30 per acre. The acreage devoted to hay and forage was 83.1 per cent of the total area devoted to crops, but yielded only 51.6 per cent of the total receipts. The average values per acre of other crops were as follows: Flowers and plants, \$2,846.34; tobacco, \$256.15; nursery products, \$206.24; onions, \$165.76; miscellaneous vegetables, \$84.21; potatoes, \$56.15; cereals, \$18.29; and orchard fruits, \$13.58. The crops yielding the highest returns per acre were grown upon land in a very high state of improvement. Their production required a relatively large amount of labor and, in addition, large expenditures for fertilizers.

CEREALS.

Table 19 is an exhibit of the changes in cereal production since 1849.

TABLE 19.—ACREAGE AND PRODUCTION OF CEREALS: 1849 TO 1899.

PART 1.—ACREAGE.

| YEAR. ¹ | Barley. | Buckwheat. | Corn. | Oats. | Rye. | Wheat. |
|--------------------|---------|------------|--------|--------|-------|--------|
| 1899..... | 1,596 | 1,835 | 25,694 | 12,589 | 350 | 271 |
| 1889..... | 4,934 | 3,117 | 23,746 | 26,618 | 1,056 | 2,027 |
| 1879..... | 3,461 | 4,535 | 36,612 | 29,485 | 3,218 | 11,218 |

¹ No statistics of acreage were secured prior to 1879.

PART 2.—BUSHEL'S PRODUCED.

| YEAR..... | Barley. | Buckwheat. | Corn. | Oats. | Rye. | Wheat. |
|-----------|---------|------------|-----------|-----------|---------|---------|
| 1899..... | 46,680 | 43,360 | 1,080,720 | 497,110 | 5,320 | 4,035 |
| 1889..... | 112,378 | 76,048 | 988,806 | 892,243 | 11,962 | 35,192 |
| 1879..... | 77,877 | 94,080 | 1,350,248 | 1,017,620 | 34,638 | 169,316 |
| 1869..... | 105,822 | 100,034 | 1,277,768 | 1,146,451 | 47,420 | 193,621 |
| 1859..... | 121,103 | 89,068 | 1,414,628 | 1,329,233 | 128,247 | 238,965 |
| 1849..... | 70,256 | 65,265 | 1,573,670 | 973,381 | 183,117 | 185,658 |

Cereal production in New Hampshire reached its highest point shortly after the middle of the last century. The decline which then began and which has continued ever since is due to the opening of a great body of fertile land in the West, better suited for the production of cereals than most of the land in New Hampshire, and to the development of our modern system of railroads, whereby western grain is brought to the markets of the East at slight expense. With the gradual abandonment of cereal production the farmers of the state turned their attention to supplying the growing demand of their own urban population for small fruits, vegetables, and dairy produce.

Since 1879 the total area devoted to grains has decreased from 88,559 acres to 42,335 acres, the percentages of decrease for the various cereals being as follows: Wheat, 97.6; rye, 89.1; buckwheat, 59.5; oats, 57.3; barley, 53.9, and corn, 29.8. Between 1889 and 1899 the acreage devoted to cereals decreased in every county of the state and more rapidly than in any preceding decade. This decrease was most marked in those counties where the most intensive cultivation prevails, while Coos and Grafton counties, where agriculture is least developed, contained a larger per cent of the total area devoted to cereals in 1899 than in 1889.

The second part of the table shows that with some exceptions the decrease in the production of cereals has been continuous since 1859, becoming more marked in the last two decades. The production of buckwheat increased in the decade 1859-1869; that of corn, in 1869-1879; and that of barley, in 1879-1889. Between 1889 and 1899 there was a marked decrease in the production of all cereals except corn, which shows an increase in acreage as well as in production.

The 25,694 acres, given in Table 19 as the area devoted to corn in 1899, does not include the acreage of corn, nonsaccharine sorghum, and similar crops grown for forage or ensilage. In 1899 there was used in the growing of such crops 11,391 acres, an area nearly one-half as great as that devoted to corn grown for its grain.

The fact that Grafton county, which shows the largest acreage of forage crops and the greatest increase since 1889 in the acreage of corn, also reports the largest increase in the number of dairy cows, indicates that there is a close relation between the increase in corn production and the recent development in dairying.

ORCHARD FRUITS.

The changes in orchard fruits since 1890 are shown in the following table:

TABLE 20.—ORCHARD TREES AND FRUITS: 1890 AND 1900.

| FRUITS. | NUMBER OF TREES. | | BUSHELS OF FRUIT. | |
|------------------------|------------------|-----------|-------------------|-----------|
| | 1900. | 1890. | 1899. | 1889. |
| Apples | 2,034,398 | 1,744,779 | 1,978,797 | 2,283,347 |
| Apricots | 141 | 191 | 2 | 504 |
| Cherries | 6,700 | 7,104 | 1,183 | 1,204 |
| Peaches | 48,819 | 19,057 | 6,054 | 19,288 |
| Pears | 38,287 | 39,378 | 19,341 | 842 |
| Plums and prunes | 18,137 | 10,151 | 4,942 | |

The value of the orchard fruits grown in 1899 was \$707,729, divided among the several counties as follows: Rockingham, \$120,176; Hillsboro, \$117,218; Merrimack, \$102,383; Cheshire, \$91,141; Strafford, \$76,542; Grafton, \$63,687; Carroll, \$44,293; Belknap, \$41,858; Sullivan, \$40,948; and Coos, \$9,483. In 1900, 94.8 per cent, and in 1890, 95.8 per cent of all the fruit trees in the state were apple trees. In ten years the number of these trees increased 16.6 per cent, the increase having been general, except in Grafton and Sullivan counties, where decreases were reported. Peaches flourish only in the southeastern part of the state, Hillsboro and Rockingham counties reporting, June 1, 1900, 71.8 per cent of the peach trees and 70.0 per cent of the crop. Between 1890 and 1900 the total number of peach trees increased 156.2 per cent. During the same period cherry trees decreased 6.5 per cent and pear trees 2.8 per cent, while plum and prune trees increased 78.7 per cent, every county except Hillsboro sharing in the gain.

As the quantity of fruit produced is determined largely by the nature of the season, which varies more or less from year to year in all the New England states, no valid comparisons can be made between the crops of 1889 and 1899. The former year was evidently more favorable to the apple crop than was 1899, for, although there was an increase in the number of trees, there was a decrease of 13.3 per cent in the quantity of fruit reported. Cherry, peach, pear, and plum trees, on the other hand, bore more abundantly in 1899 than in 1889, especially in Cheshire and Rockingham counties.

VEGETABLES AND SMALL FRUITS.

The value of all vegetables produced in the state in 1899, including potatoes, sweet potatoes, and onions, was \$1,717,772, of which 63.5 per cent represents the

value of potatoes. Aside from the land devoted to potatoes, sweet potatoes, and onions, 7,262 acres were used in the growing of miscellaneous vegetables. Of this area 5,678 acres were included in family gardens or farms, the vegetable products of which were not reported in detail. Of the remaining 1,584 acres, concerning which detailed reports were received, 731 were devoted to sweet corn; 310, to cabbages; 124, to tomatoes; 64, to turnips; 58, to cucumbers; and 297, to other vegetables.

The total area devoted to small fruits in 1899 was 734 acres, distributed among 3,235 farms, and the value of the fruits grown was \$116,830, an average of \$159 per acre. As in the case of orchard trees, the area reported in the northern part of the state is relatively small. Hillsboro and Rockingham counties together report approximately one-half the totals for the state. The acreage and production of berries were as follows: Blackberries and dewberries, 65 acres and 105,290 quarts; cranberries, 23 acres and 31,136 quarts; currants, 27 acres and 34,060 quarts; raspberries and loganberries, 80 acres and 124,760 quarts; strawberries, 307 acres and 568,640 quarts; gooseberries, 5 acres and 3,540 quarts; and other small fruits, 227 acres and 393,750 quarts.

CULTURE OF FLOWERS, AND USE OF GLASS IN AGRICULTURE.

The total area devoted to the cultivation of flowers and plants in 1899 was 38 acres, and the products sold therefrom were valued at \$108,161.

The proprietors of 60 of the 83 establishments reported, made commercial floriculture their principal business. They had a capital of \$286,162, of which amount \$127,125 represents the value of land; \$138,825, buildings; \$14,047, implements; and \$6,165, live stock. The receipts from products sold by these 60 establishments were \$127,267, of which \$101,559 was from the sale of flowers and plants and \$25,708 from the sale of miscellaneous products. The amount spent for fertilizers was \$1,977, and for labor \$20,070.

Florists reported greenhouses with a glass surface of 452,963 square feet, covering 339,722 square feet of land. In addition, 97 farmers had an area under glass of 214,258 square feet, used principally for growing vegetables and plants, making the total area under glass in the state 553,980 square feet. Florists had an average glass-covered area of 5,662 square feet, and farmers and market gardeners 2,209 square feet.

LABOR AND FERTILIZERS.

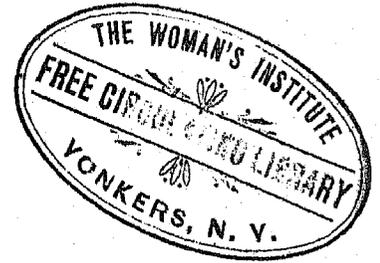
The total expenditure for labor on farms in 1899, including the value of board furnished, was \$2,304,520, an average of \$79 per farm. The average was highest on the most intensively cultivated farms, having been

\$334 for florists' establishments, \$255 for tobacco farms, \$196 for nurseries, \$111 for dairy farms, and \$38 for hay and grain farms. Managers expended \$289, owners \$74, cash tenants \$55, and share tenants \$57 per farm. White farmers expended \$79 and colored farmers \$23 per farm.

Fertilizers purchased in 1899 cost \$367,980, an aver-

age of \$12.55 per farm, and an increase since 1890 of 49.4 per cent. The average expenditure was greatest for tobacco farms, and least for hay and grain farms, the amounts being \$71 and \$6, respectively. For florists' establishments the average was \$33; for nurseries, \$56; for vegetable farms, \$15; and for dairy farms, \$16.

Twelfth Census of the United States.



CENSUS BULLETIN.

No. 114.

WASHINGTON, D. C.

November 20, 1901.

MANUFACTURES.

IOWA.

HON. WILLIAM R. MERRIAM,
Director of the Census.

SIR: I transmit herewith, for publication in bulletin form, the statistics of manufacturing and mechanical industries for the state of Iowa for the census year 1900, taken in accordance with the provisions of section 7 of the act of March 3, 1899. This section requires that "The schedules of inquiries relating to the products of manufacturing and mechanical establishments shall embrace the name and location of each establishment; character of organization, whether individual, cooperative, or other form; date of commencement of operations; character of business or kind of goods manufactured; amount of capital invested; number of proprietors, firm members, copartners, or officers, and the amount of their salaries; number of employees, and the amount of their wages; quantity and cost of materials used in manufactures; amount of miscellaneous expenses; quantity and value of products; time in operation during the census year; character and quantity of power used; and character and number of machines employed."

In each of the above particulars the requirements of the law have been observed, but certain of the data thus elicited are reserved for publication in the final volumes.

There were 39 cities in the state withdrawn from the enumerators and their manufacturing statistics collected by special agents, in accordance with the further provision of section 7 of the Census Act. Wherever the phrase "urban manufactures" is used in this bulletin, it applies only to those cities which were withdrawn from the enumerators and committed to special agents, and only to manufacturing establishments within the corporate limits of such places.

Eight cities in Iowa contain a population exceeding 20,000 each: Burlington, Cedar Rapids, Clinton, Council Bluffs, Davenport, Des Moines, Dubuque, and Sioux City. The manufacturing statistics of all these cities are presented by specified industries, and the statistics of Burlington, Council Bluffs, Davenport, Des Moines, Dubuque, and Sioux City are presented in comparison with the returns of the Eleventh Census. The statistics of Cedar Rapids and Clinton were not shown separately in 1890, and com-

parisons with that year are, therefore, not possible in these cases.

Prof. W. R. Patterson of the University of Iowa rendered valuable assistance in the preparation of the text for the accompanying report.

The statistics of Iowa are presented in 9 tables: Table 1 showing comparative figures for the state at the several censuses; Table 2 showing all the industries of the state divided between hand trades and the manufactures proper, and also the statistics of educational, eleemosynary, and penal institutions, and establishments with a product of less than \$500, which two latter classes were not reported at previous censuses; Table 3 showing the statistics of the 11 leading industries of the state for 1890 and 1900; Table 4 showing the totals for the cities of Burlington, Council Bluffs, Davenport, Des Moines, Dubuque, and Sioux City at the censuses of 1890 and 1900; Table 5 showing the urban manufactures of the state in comparison with the totals for the entire state and the state exclusive of the cities withdrawn from the enumerators; Table 6 showing the statistics for the state by counties; Table 7 showing the statistics for the state by specified industries; Table 8 showing the statistics for the cities of Burlington, Cedar Rapids, Clinton, Council Bluffs, Davenport, Des Moines, Dubuque, and Sioux City by specified industries; and Table 9 showing the totals for all industries in each of the cities withdrawn from the enumerators (exclusive of those shown in Table 8).

Table 1 shows the growth of manufactures in Iowa for the half century which terminates with the Twelfth Census. The manufacturing statistics of the censuses prior to 1850 were too imperfect and fragmentary in character to make it proper to reproduce them in such a table as a measure of industrial growth in the first half of the century. Owing to changes in the method of taking the census, comparisons between the earlier and later decades, represented in Table 1, should be drawn only in the most general way. Nevertheless, the rate of growth in Iowa manufactures may be fairly inferred from the figures given.

In drafting the schedules of inquiry for the census of 1900 care was taken to preserve the basis of comparison with prior censuses. Comparison may be made safely

with respect to all the items of inquiry except those relating to capital, salaried officials, clerks, etc., and their salaries, the average number of employees, and the total amount of wages paid. Live capital, that is, cash on hand, bills receivable, unsettled ledger accounts, raw materials, stock in process of manufacture, finished products on hand, and other sundries, was first called for at the census of 1890. No definite attempt was made, prior to the census of 1890, to secure a return of live capital invested.

Changes were made in the inquiries relating to employees and wages in order to eliminate defects found to exist on the form of inquiry adopted in 1890. At the census of 1890 the average number of persons employed during the entire year was called for, and also the average number employed at stated weekly rates of pay, and the average number was computed for the actual time the establishments were reported as being in operation. At the census of 1900 the greatest and least numbers of employees were reported, and also the average number employed during each month of the year. The average number of wage-earners (men, women, and children) employed during the entire year was ascertained by using 12, the number of calendar months, as a divisor into the total of the average numbers reported for each month. This difference in the method of ascertaining the average number of wage-earners during the entire year may have resulted in a variation in the number, and should be considered in making comparisons.

At the census of 1890 the number and salaries of proprietors and firm members actively engaged in the business or in supervision were reported, combined with clerks and other officials. In cases where proprietors and firm members were reported without salaries, the amount that would ordinarily be paid for similar services was estimated. At the census of 1900 only the number of proprietors and firm members actively engaged in the industry or in supervision was ascertained, and no salaries were reported for this class. It is therefore impossible to compare the number and salaries of salaried officials of any character for the two censuses.

Furthermore, the schedules for 1890 included in the wage-earning class, overseers, foremen, and superintendents (not general superintendents or managers), while the census of 1900 separates from the wage-earning class such salaried employees as general superintendents, clerks, and salesmen. It is possible and probable that this change in the form of the question has resulted in eliminating from the wage-earners, as reported by the present census, many high-salaried employees included in that group for the census of 1890.

In some instances, the number of proprietors and firm members, shown in the accompanying tables, falls short of the number of establishments reported. This is accounted for by the fact that no proprietors or firm members are reported for corporations or cooperative establishments. The number of salaried officials, clerks, etc., is the greatest number reported employed at any one time during the year. This number may appear excessive as compared with the amount of salaries paid; but allowance should be made for

the fact that a considerable number of clerks are employed for only a part of the year; consequently the amount they receive would be small if reckoned as an annual salary.

The reports show a capital of \$102,783,103 invested in manufactures and mechanical industries in the 14,819 establishments reporting for the state of Iowa. This sum represents the value of land, buildings, machinery, tools, and implements, and the live capital utilized, but does not include the capital stock of any of the manufacturing corporations of the state. The value of the products is returned at \$164,617,877, to produce which involved an outlay of \$4,486,117 for salaries of officials, clerks, etc.; \$23,981,680 for wages; \$7,988,767 for miscellaneous expenses, including rent, taxes, etc.; and \$101,170,357 for materials used, mill supplies, freight, and fuel. It is not to be assumed, however, that the difference between the aggregate of these sums and the value of the products is, in any sense, indicative of the profits in the manufacture of the products during the census year. The census schedule takes no cognizance of the cost of selling manufactured articles, or of interest on capital invested, or of the mercantile losses incurred in the business, or of depreciation in plant. The value of the product given is the value as obtained or fixed at the shop or factory. This statement is necessary in order to avoid erroneous conclusions from the figures presented.

The value of products for the state of Iowa, \$164,617,877, is the gross value, and not the net or true value. The difference between these two should be carefully noted. The gross value is found by adding the value of products in the separate establishments. But the finished product of one establishment is often the raw material for another. In such cases the value of the former reappears in the latter, and thus the original cost of certain materials may be included several times in the gross value. The net or true value is found by subtracting from the gross value the value of all materials purchased in a partly manufactured form. In this way the duplications in the gross value are eliminated.

At the census of 1890 the schedule was so framed that it was impossible to find the net or true value. In the present census the schedule asked for the value of the materials in two classes, those purchased in the crude state and those purchased in the partly manufactured form. From the answers to these questions the net or true value of products may be computed. Thus, for Iowa, the gross value of products for 1900 was \$164,617,877. The value of materials purchased in a partly manufactured form was \$44,118,832. The difference, \$120,499,045, is the net or true value of products, and represents the increase in the value of raw materials resulting from the various processes of manufacture.

Very respectfully,



Chief Statistician for Manufactures.

IOWA.

Table 1 shows the manufacturing and mechanical industries of the state of Iowa as returned at the censuses of 1850 to 1900, inclusive, with the percentages of increase for each decade. This table also presents the average number of wage-earners employed by manufacturing establish-

ments, in comparison with the total population of the state, and the value of the land and buildings owned and reported by manufacturers as capital, in comparison with the assessed value of all real estate and improvements.

TABLE 1.—COMPARATIVE SUMMARY, 1850 TO 1900, WITH PER CENT OF INCREASE FOR EACH DECADE.

| | DATE OF CENSUS. | | | | | | PER CENT OF INCREASE. | | | | |
|---|-----------------|---------------|---------------|---------------|---------------|--------------|-----------------------|--------------|--------------|--------------|--------------|
| | 1900 | 1890 | 1880 | 1870 | 1860 | 1850 | 1890 to 1900 | 1880 to 1890 | 1870 to 1880 | 1860 to 1870 | 1850 to 1860 |
| Number of establishments | 14,819 | 7,440 | 6,921 | 6,566 | 1,989 | 522 | 99.2 | 7.5 | 5.4 | 238.6 | 271.5 |
| Capital | \$102,788,108 | \$77,618,097 | \$33,987,886 | \$22,420,183 | \$7,247,180 | \$1,292,875 | 32.5 | 128.1 | 51.6 | 209.4 | 460.5 |
| Salaries officials, clerks, etc., number | 5,664 | 18,187 | (2) | (2) | (2) | (2) | 80.4 | | | | |
| Salaries | \$4,486,117 | \$5,449,377 | (2) | (2) | (2) | (2) | 17.7 | | | | |
| Wage-earners, average number | 58,553 | 61,037 | 23,372 | 25,032 | 6,307 | 1,707 | 14.7 | 79.9 | 13.3 | 296.9 | 269.5 |
| Total wages | \$23,981,680 | \$20,429,620 | \$9,725,962 | \$6,893,202 | \$1,922,417 | \$473,016 | 17.1 | 110.5 | 41.1 | 258.6 | 306.4 |
| Men, 16 years and over | 48,417 | 44,210 | 25,382 | 23,395 | 6,142 | 1,687 | 9.5 | 74.2 | 8.5 | 289.0 | 264.1 |
| Wages | \$21,893,988 | \$19,232,655 | (2) | (2) | (2) | (2) | 13.8 | | | | |
| Women, 16 years and over | 8,248 | 5,183 | 1,431 | 951 | 166 | 20 | 59.1 | 262.2 | 50.5 | 476.4 | 725.0 |
| Wages | \$1,766,858 | \$909,806 | (2) | (2) | (2) | (2) | 76.7 | | | | |
| Children, under 16 years | 1,838 | 1,644 | 1,559 | 686 | (2) | (2) | 14.8 | 5.4 | 127.3 | | |
| Wages | \$270,889 | \$197,169 | (2) | (2) | (2) | (2) | 37.4 | | | | |
| Miscellaneous expenses | \$7,988,767 | \$5,782,206 | (4) | (4) | (4) | (4) | 39.4 | | | | |
| Cost of materials used | \$101,170,357 | \$79,202,407 | \$43,704,311 | \$27,682,096 | \$8,612,259 | \$2,356,881 | 27.6 | 62.8 | 75.9 | 221.4 | 265.4 |
| Value of products, including custom work and repairing | \$164,617,877 | \$125,049,183 | \$71,045,926 | \$46,684,322 | \$13,971,325 | \$3,551,783 | 81.6 | 76.0 | 52.7 | 233.1 | 298.4 |
| Total population | 2,231,468 | 1,911,896 | 1,624,615 | 1,194,020 | 674,913 | 192,214 | 16.7 | 17.7 | 36.1 | 76.0 | 251.1 |
| Wage-earners engaged in manufactures | 58,553 | 61,037 | 23,372 | 25,032 | 6,307 | 1,707 | 14.7 | 79.9 | 13.8 | 296.9 | 269.5 |
| Per cent of total population | 2.6 | 2.7 | 1.7 | 2.1 | 0.9 | 0.9 | | | | | |
| Assessed value of real estate | \$440,769,952 | \$370,921,446 | \$297,254,342 | \$226,610,638 | \$149,438,423 | \$15,672,332 | 18.8 | 21.8 | 31.2 | 51.6 | 853.5 |
| Value of land and buildings invested in manufactures ⁷ | \$30,255,515 | \$21,697,899 | (2) | (2) | (2) | (2) | 89.4 | | | | |
| Per cent of assessed value | 6.9 | 5.9 | | | | | | | | | |

¹ Includes proprietors and firm members, with their salaries; number only reported in 1900. (See Table 7.)

² Not reported separately.

³ Decrease.

⁴ Not reported.

⁵ Exclusive of 385 Indians and other persons on Indian reservations, which classes were not included at previous censuses.

⁶ As given for the year 1900 in Dana's supplement, "State and City," to the Commercial and Financial Chronicle, under date of April 13, 1901.

⁷ Does not include value of rented property.

Although agriculture is the leading pursuit of Iowa, manufacturing and mechanical industries have had a steady and significant growth during the last half century.

The population of the state in 1850 was 192,214, and in 1900, 2,231,468, an increase in the fifty years of 2,039,254, or 1,060.9 per cent. The average number of wage-earners employed in manufacturing establishments increased from 1,707 in 1850 to 58,553 in 1900, an increase of 3,330.2 per cent in the fifty years, and embraced, in the latter year, 2.6 per cent of the entire population, as compared with nine-tenths of one per cent in 1850. In the thirty years since 1870, however, the difference in the rate of growth of the wage-earning class as compared with that of the total population has been much less pronounced, the population having increased 86.9 per cent and the wage-earners 133.9 per cent. It is furthermore noticeable that the gain, during this period, in per cent of average number of wage-earners over population, is limited to the decade ending in 1890. Probably the best indication of the importance of the wage-earning class is afforded by the greatest number employed at any one time during the year. In 1900 this was 85,932, or 3.9 per cent of the total population of the state.

During the decade from 1860 to 1870 the value of the products increased 233.1 per cent. The values for 1870, however, were expressed in a currency which was at a discount in gold and should be reduced about one-fifth for purposes of comparison with other census years.

Iowa has good transportation facilities, and an abundance of coal. Its manufacturing enterprises are evenly distributed over the state, and are diversified in character. No one portion or particular city of the state can lay claim to a dominant interest in manufactures or a monopoly of any one of its leading industries. The southern and eastern portions were settled first and still have the denser population, yet in the northwestern portion is located the leading manufacturing city.

Table 2 divides the industries of the state between the hand trades and the manufactures proper. This table also gives the statistics for educational, eleemosynary, and penal institutions, and establishments with a product of less than \$500; these were not reported at previous censuses, and are, therefore, omitted from the other tables and their use confined to Table 2.

TABLE 2.—SUMMARY FOR ALL ESTABLISHMENTS.

| CLASSES. | Number of establishments. | Capital. | Proprietors and firm members. | WAGE-EARNERS. | | Miscellaneous expenses. | COST OF MATERIALS USED. | | | | Value of products, including custom work and repairing. |
|---|---------------------------|---------------|-------------------------------|-----------------|--------------|-------------------------|-------------------------|-------------------------|---|---------------------|---|
| | | | | Average number. | Total wages. | | Total. | Purchased in raw state. | Purchased in partially manufactured form. | Fuel, freight, etc. | |
| Total | 18,429 | \$104,343,592 | 20,571 | 59,367 | \$23,988,057 | \$8,083,729 | \$101,667,061 | \$53,240,444 | \$44,560,901 | \$3,865,716 | \$165,776,701 |
| Hand trades ¹ | 6,924 | 8,722,661 | 8,051 | 11,088 | 4,629,786 | 1,269,740 | 9,931,978 | 120,423 | 9,429,121 | 882,484 | 22,286,774 |
| Educational, eleemosynary, and penal institutions | 21 | 169,690 | 104 | 55 | 18,476 | 11,671 | 194,741 | 12,898 | 170,639 | 11,204 | 261,344 |
| Establishments with a product of less than \$500 | 3,589 | 1,440,799 | 3,848 | 759 | 37,901 | 83,291 | 301,963 | 28,784 | 271,430 | 1,799 | 897,570 |
| All other establishments | 7,895 | 94,010,442 | 8,568 | 47,465 | 19,301,894 | 6,719,027 | 91,238,379 | 53,078,389 | 34,689,711 | 3,470,279 | 142,351,103 |

¹ Includes bicycle and tricycle repairing, 130; blacksmithing and wheelwrighting, 2,408; boots and shoes, custom work and repairing, 475; carpentering, 740; clothing, men's, custom work and repairing, 500; clothing, women's, dressmaking, 291; dyeing and cleaning, 31; furniture, cabinetmaking, repairing, and upholstering, 103; lock and gun smithing, 41; masonry, brick and stone, 170; millinery, custom work, 926; painting, house, sign, etc., 338; paper hanging, 28; plastering and stuccowork, 68; plumbing, and gas and steam fitting, 196; sewing machine repairing, 6; typewriter repairing, 1; watch, clock, and jewelry repairing, 482.

Of the 18,429 establishments of all classes shown in this table, 10,513, or 57 per cent, were small shops included in the groups of "hand trades" and "establishments with a product of less than \$500." The value of the products of these establishments, consisting principally of the sums received for custom work and repairing, amounted to

\$23,064,344, or only 13.9 per cent of the total value of the products of the state.

In addition to the 18,429 active establishments in the state during the census year, with a capital of \$104,343,592, shown in Table 2, there were 77 idle establishments, with a capital of \$1,293,220, divided as follows:

| INDUSTRIES. | Number of idle establishments. | Capital. | INDUSTRIES. | Number of idle establishments. | Capital. |
|--|--------------------------------|----------|---|--------------------------------|----------|
| Agricultural implements | 3 | \$14,800 | Paper and wood pulp | 1 | \$30,000 |
| Brick and tile | 17 | 34,425 | Plumbers' supplies | 1 | 41,000 |
| Cheese, butter, and condensed milk, factory product | 9 | 85,200 | Pottery, terra cotta, and fire-clay products | 1 | 11,000 |
| Flouring and grist mill products | 12 | 79,500 | Scales and balances | 1 | 83,000 |
| Lime and cement | 2 | 114,500 | Slaughtering, wholesale, not including meat packing | 1 | 235,000 |
| Liquors, distilled | 1 | 18,200 | Starch | 2 | 450,000 |
| Lumber, planing mill products, including sash, doors, and blinds | 3 | 11,450 | Woolen goods | 3 | 18,500 |
| Malt | 1 | 50,000 | All other industries | 16 | 22,545 |
| Oil, linseed | 8 | 65,500 | | | |

TABLE 3.—COMPARATIVE SUMMARY OF ELEVEN LEADING INDUSTRIES.

| INDUSTRIES. | Year. | Number of establishments. | Capital. | WAGE-EARNERS. | | Miscellaneous expenses. | Cost of materials used. | Value of products, including custom work and repairing. |
|---|-------|---------------------------|--------------|-----------------|--------------|-------------------------|-------------------------|---|
| | | | | Average number. | Total wages. | | | |
| Total for selected industries for state | 1900 | 3,821 | \$51,286,287 | 27,103 | \$11,682,568 | \$2,938,455 | \$67,199,454 | \$95,924,681 |
| | 1890 | 2,618 | 43,811,727 | 28,767 | 11,030,592 | 2,915,553 | 56,130,094 | 79,751,171 |
| Increase, 1890 to 1900 | | 1,203 | 2,474,560 | 11,659 | 202,006 | 22,902 | 11,069,360 | 16,173,510 |
| Per cent of increase | | 46.2 | 5.1 | 15.8 | 1.7 | 0.8 | 19.7 | 20.3 |
| Per cent of total of all industries in state | 1900 | 25.8 | 49.9 | 46.3 | 49.4 | 36.8 | 66.4 | 58.3 |
| | 1890 | 85.1 | 63.0 | 56.4 | 56.9 | 50.9 | 70.8 | 63.8 |
| Carriages and wagons | 1900 | 211 | 4,087,400 | 1,692 | 713,901 | 243,794 | 1,863,988 | 3,931,067 |
| | 1890 | 294 | 2,765,207 | 1,602 | 769,923 | 142,236 | 1,449,922 | 3,168,545 |
| Cars and general shop construction and repairs by steam railroad companies. | 1900 | 58 | 3,277,617 | 5,497 | 2,948,947 | 124,453 | 2,896,269 | 6,221,378 |
| | 1890 | 41 | 2,404,648 | 3,812 | 2,121,824 | 300 | 2,244,274 | 4,473,059 |
| Cheese, butter, and condensed milk, factory product | 1900 | 907 | 3,459,017 | 1,133 | 588,633 | 153,990 | 13,501,556 | 15,846,077 |
| | 1890 | 497 | 2,074,177 | 2,355 | 944,895 | 121,160 | 8,360,689 | 10,545,182 |
| Clay products: | 1900 | 356 | 3,437,613 | 2,220 | 892,159 | 140,459 | 517,580 | 2,224,920 |
| | 1890 | 289 | 2,114,863 | 2,788 | 724,999 | 105,934 | 332,393 | 1,775,165 |
| Brick and tile | 1900 | 339 | 3,076,355 | 1,986 | 768,860 | 115,897 | 460,313 | 1,976,323 |
| | 1890 | 260 | 1,802,942 | 2,543 | 628,588 | 84,311 | 282,431 | 1,537,390 |
| Pottery, terra cotta, and fire-clay products | 1900 | 17 | 361,258 | 234 | 98,299 | 24,562 | 57,267 | 243,597 |
| | 1890 | 29 | 311,921 | 245 | 96,411 | 24,123 | 49,962 | 237,275 |
| Flouring and grist mill products | 1900 | 702 | 6,421,078 | 1,285 | 526,479 | 304,256 | 11,272,217 | 13,823,083 |
| | 1890 | 441 | 6,696,759 | 1,218 | 507,414 | 363,993 | 9,786,174 | 11,833,737 |
| Food preparations | 1900 | 16 | 2,501,521 | 609 | 209,031 | 196,297 | 2,388,003 | 3,604,031 |
| | 1890 | 8 | 579,866 | 147 | 59,364 | 35,700 | 706,739 | 900,311 |
| Foundry and machine shop products | 1900 | 190 | 3,732,774 | 2,372 | 1,088,312 | 200,918 | 2,189,660 | 4,460,914 |
| | 1890 | 126 | 3,032,277 | 2,142 | 1,066,715 | 172,788 | 1,454,164 | 3,432,360 |

¹ Decrease.

TABLE 3.—COMPARATIVE SUMMARY OF ELEVEN LEADING INDUSTRIES—Continued.

| INDUSTRIES. | Year. | Number of establishments. | Capital. | WAGE-EARNERS. | | Miscellaneous expenses. | Cost of materials used. | Value of products, including custom work and repairing. |
|--|-------------|---------------------------|-------------|-----------------|--------------|-------------------------|-------------------------|---|
| | | | | Average number. | Total wages. | | | |
| Lumber and timber products ----- | 1900 | 254 | \$8,762,219 | 2,793 | \$1,046,181 | \$342,386 | \$5,324,034 | \$8,677,058 |
| | 1890 | 143 | 17,630,335 | 6,819 | 2,101,645 | 639,390 | 7,960,286 | 12,050,302 |
| Lumber, planing mill products, including sash, doors, and blinds | 1900 | 65 | 3,576,305 | 2,372 | 983,924 | 255,979 | 3,195,243 | 5,295,546 |
| | 1890 | 46 | 3,044,145 | 1,933 | 825,435 | 182,242 | 2,062,125 | 3,638,856 |
| Printing and publishing: | | | | | | | | |
| | Total ----- | 1,025 | 5,679,390 | 4,248 | 1,656,844 | 533,937 | 1,494,260 | 6,145,563 |
| | 1890 | 699 | 4,084,430 | 3,296 | 1,385,680 | 621,645 | 1,118,165 | 4,651,543 |
| Book and job ----- | 1900 | 115 | 976,341 | 855 | 345,665 | 89,247 | 411,711 | 1,210,110 |
| | 1890 | 56 | 582,720 | 442 | 182,495 | 74,035 | 254,841 | 732,925 |
| Newspapers and periodicals ----- | 1900 | 910 | 4,703,049 | 3,393 | 1,311,179 | 444,690 | 1,082,549 | 4,935,453 |
| | 1890 | 643 | 3,501,710 | 2,854 | 1,203,185 | 547,460 | 863,764 | 3,513,623 |
| Slaughtering: | | | | | | | | |
| | Total ----- | 27 | 6,351,353 | 2,887 | 1,208,167 | 441,086 | 21,556,644 | 25,695,044 |
| | 1890 | 29 | 4,485,020 | 2,575 | 1,122,695 | 526,765 | 20,655,223 | 23,425,576 |
| Slaughtering and meat packing, wholesale ----- | 1900 | 20 | 6,264,578 | 2,874 | 1,201,681 | 437,103 | 21,195,036 | 25,296,518 |
| | 1890 | 25 | 4,105,020 | 2,013 | 862,075 | 452,147 | 17,975,828 | 19,615,336 |
| Slaughtering, wholesale, not including meat packing ----- | 1900 | 7 | 86,775 | 13 | 6,486 | 4,833 | 361,578 | 393,526 |
| | 1890 | 4 | 380,000 | 562 | 260,620 | 74,618 | 3,279,395 | 3,810,190 |

During recent years there has been a marked change in the character of the industries of the state. In the early period of settlement the principal products manufactured were lumber, flour, leather, and woolen goods, all of which, with the exception of flour, have since declined, while slaughtering and the factory manufacture of butter and cheese have taken their places in the list of leading industries. In the discussion of Table 3, which follows, the industries are ranked with reference to the value of products.

Table 3 shows that wholesale slaughtering and meat packing is the most important industry in the state. The 27 establishments reported for this industry gave employment to 2,887 wage-earners, or 4.9 per cent of the wage-earners employed in the state, and the products were valued at \$25,695,044, or 15.6 per cent of the total value of the products of the state. In 1890 there were 29 establishments reported, with 2,575 wage-earners, and products valued at \$23,425,576. The increase in the value of products during the decade was 9.7 per cent.

The factory manufacture of butter, cheese, and condensed milk ranks second in importance, with 907 establishments for 1900, 1,133 wage-earners, and products valued at \$15,846,077. In 1890 there were 497 establishments engaged in this industry, with 2,355 wage-earners, and products valued at \$10,545,182. The increase in the value of products during the decade was 50.3 per cent.

Flour and grist milling holds the third place among the manufacturing industries of the state. There were 702 establishments engaged in this industry in 1900, with 1,235 wage-earners, and products valued at \$13,823,083. In 1890 there were 441 establishments, 1,248 wage-earners, and products valued at \$11,833,737. The increase in the value of products during the decade was 16.8 per cent.

There were 264 establishments engaged in the manufacture of lumber and timber products in 1900, with 2,793 wage-earners, and products valued at \$8,677,058. In 1890, 143 establishments were reported, with 6,819 wage-earners, and products valued at \$12,056,302. The decrease in the

value of products during the decade was 28 per cent. This decline in the lumber and timber industry is very significant, if quality and quantity of product be considered. In the earlier decades the lumber companies operated along the banks of the rivers, cutting only the larger trees, and culling from an extended area the finer woods. As a result, the present lumber supply is gained largely from trees of smaller diameter, which formerly would have been rejected. Walnut and oak have almost entirely disappeared, while logs of all kinds must be conveyed considerable distances to ship or raft.

Allied to the lumber and timber industry is the manufacture of planing mill products, including sash, doors, and blinds. There were 65 establishments engaged in this industry in 1900, with 2,372 wage-earners, and products valued at \$5,295,546. In 1890 there were 46 establishments, 1,933 wage-earners, and products valued at \$3,588,856. There has been an increase of 47.6 per cent in the value of products during the decade.

There were 58 establishments engaged in car construction and repairs by steam railroad companies in 1900, with 5,497 wage-earners, and products valued at \$6,221,378. In 1890 there were 41 establishments, 3,812 wage-earners, and products valued at \$4,473,089. The increase in the value of products during the decade was 39.1 per cent. In the number of wage-earners and amount paid in wages, this industry ranks first among the manufacturing industries of the state. The location of the state is such that it is a highway for the transfer of commodities between the East and West, while extensive transportation facilities are necessary to place its own products on the market. As a result of these conditions, extensive car construction and repair shops have been located at Burlington, Davenport, Boone, Belle Plaine, Waterloo, Oelwein, and other cities.

There were 1,025 establishments engaged in printing and publishing in 1900, with 4,248 wage-earners, and products valued at \$6,145,563. In 1890 there were 699 establishments, 3,296 wage-earners, and products valued

at \$4,551,548. The increase in the value of products during the decade was 35 per cent.

There were 190 foundries and machine shops in the state in 1900, with 2,372 wage-earners, and products valued at \$4,460,914, while in 1890, 126 such establishments were reported, with 2,142 wage-earners, and products valued at \$3,432,360. There has been an increase of 30 per cent in the value of products during the decade.

There were 211 establishments engaged in the manufacture of carriages and wagons in 1900, with 1,692 wage-earners, and products valued at \$3,931,067. In 1890 there were 294 establishments, 1,602 wage-earners, and products valued at \$3,168,545. The value of products increased 24.1 per cent during the decade.

There were 16 establishments engaged in the manufacture of food preparations in 1900, with 609 wage-earners, and products valued at \$3,604,031. In 1890 there were 8 establishments, with 147 wage-earners, and products valued at \$900,811. The value of products increased 300.1 per cent during the decade.

In 1900, 356 establishments were reported as engaged in the manufacture of clay products, with 2,220 wage-earners, and products valued at \$2,224,920. In 1890 there were 289 establishments, 2,788 wage-earners, and products valued at \$1,775,165. The value of products increased 25.3 per cent during the decade.

An industry of recent origin, peculiar to Iowa, is the manufacture of pearl buttons from the shells of the native fresh-water mussel. The statistics of this industry appear in Table 7, under the classification "buttons." There were 53 establishments reported in 1900, with 1,402 wage-earners, and products valued at \$866,538. The leading center of the industry is Muscatine, which, in 1898, had 5 completely organized plants and 28 saw works; but almost every town on the Mississippi from Sabula to Fort Madison, a distance of 167 miles, is provided with plants,

Davenport and Clinton being secondary centers. The industry has been pursued also at Cedar Rapids, Vinton, and Charles City on the Cedar River; at Coralville on the Iowa River; and at West Liberty, What Cheer, and Oskaloosa.¹ The credit for introducing the industry into the state is given to Mr. J. F. Boepple, who learned the trade in his native city of Hamburg, Germany. Assured of the excellence of the mussels in the Mississippi and the rivers of Iowa, he located his factory at Muscatine in 1891. The success of the industry was at once assured; by 1898 no less than 1,000 persons were engaged in the mussel fishery between Fort Madison and Sabula. The fear that the mussel beds will soon be exhausted seems well founded. The beds opposite Muscatine and New Boston are already worked out. No attention is paid to the spawning season of the principal species; multitudes of small mussels that can not be utilized are left upon the banks or ice to die, although, even when proper care is taken, it requires from ten to eighteen years to grow serviceable shell. At present, however, the industry is in a fairly prosperous condition, and the Mississippi River buttons are sold in every state in the Union, as well as in Canada and England. Only a portion of the product sold, however, is finished in Iowa or the adjoining section of Illinois. Several of the larger button factories of the East have "saw works" located here, which cut out the rough blanks and ship them east for final manufacture. In a few cases the rough shells have been shipped.

URBAN MANUFACTURES.

Table 4 shows the totals for the manufacturing and mechanical industries of the cities of Burlington, Council Bluffs, Davenport, Des Moines, Dubuque, and Sioux City, as returned at the censuses of 1890 and 1900, with the percentages of increase.

¹ Report of the Iowa Bureau of Labor Statistics, 1897-1898, page 96.

TABLE 4.—COMPARATIVE SUMMARY, BURLINGTON, COUNCIL BLUFFS, DAVENPORT, DES MOINES, DUBUQUE, AND SIOUX CITY, 1890 AND 1900, WITH PER CENT OF INCREASE.

| | Year. | Number of establishments. | Capital. | WAGE-EARNERS. | | Miscellaneous expenses. | Cost of materials used. | Value of products, including custom work and repairing. |
|--|-------|---------------------------|-----------------|-----------------|----------------|-------------------------|-------------------------|---|
| | | | | Average number. | Total wages. | | | |
| The State..... | 1900 | 14, 819 | \$102, 733, 103 | 58, 553 | \$23, 931, 680 | \$7, 938, 767 | \$101, 170, 357 | \$164, 617, 877 |
| Per cent of increase..... | 1890 | 7, 440 | 77, 513, 037 | 51, 037 | 20, 420, 620 | 5, 732, 206 | 79, 292, 407 | 125, 049, 183 |
| | | 99.2 | 32.5 | 14.7 | 17.1 | 39.4 | 27.6 | 31.6 |
| Burlington..... | 1900 | 340 | 5, 235, 624 | 2, 598 | 1, 013, 998 | 414, 819 | 2, 809, 536 | 5, 334, 196 |
| Per cent of increase..... | 1890 | 223 | 3, 963, 986 | 2, 935 | 1, 157, 414 | 250, 615 | 3, 039, 200 | 5, 413, 188 |
| | | 52.5 | 32.1 | 111.5 | 112.4 | 59.8 | 19.3 | 11.5 |
| Council Bluffs..... | 1900 | 198 | 1, 176, 408 | 1, 179 | 609, 905 | 160, 871 | 1, 224, 814 | 2, 506, 830 |
| Per cent of increase..... | 1890 | 123 | 1, 292, 283 | 1, 469 | 701, 723 | 92, 836 | 1, 272, 946 | 2, 527, 388 |
| | | 54.7 | 19.0 | 119.7 | 113.1 | 73.2 | 13.8 | 2.7 |
| Davenport..... | 1900 | 416 | 10, 774, 707 | 4, 348 | 1, 892, 737 | 855, 397 | 6, 854, 677 | 11, 573, 670 |
| Per cent of increase..... | 1890 | 475 | 8, 732, 122 | 4, 461 | 1, 640, 495 | 780, 201 | 6, 098, 349 | 10, 357, 232 |
| | | 112.4 | 23.4 | 12.5 | 15.4 | 9.6 | 12.4 | 11.7 |
| Des Moines..... | 1900 | 494 | 7, 911, 764 | 4, 557 | 1, 942, 509 | 894, 691 | 4, 975, 563 | 10, 488, 189 |
| Per cent of increase..... | 1890 | 330 | 8, 877, 140 | 3, 420 | 1, 631, 107 | 442, 182 | 4, 468, 377 | 7, 931, 272 |
| | | 49.7 | 104.1 | 33.2 | 19.1 | 102.3 | 12.9 | 32.2 |
| Dubuque..... | 1900 | 460 | 8, 117, 358 | 5, 503 | 2, 012, 153 | 1, 028, 245 | 5, 930, 017 | 10, 952, 204 |
| Per cent of increase..... | 1890 | 262 | 7, 016, 802 | 4, 193 | 1, 715, 376 | 564, 377 | 5, 934, 431 | 9, 834, 860 |
| | | 75.6 | 15.7 | 31.1 | 17.3 | 32.2 | 10.9 | 10.7 |
| Sioux City..... | 1900 | 329 | 5, 691, 644 | 3, 104 | 1, 485, 066 | 664, 436 | 10, 669, 072 | 15, 469, 702 |
| Per cent of increase..... | 1890 | 196 | 5, 222, 626 | 2, 629 | 1, 520, 576 | 494, 439 | 10, 295, 190 | 14, 119, 843 |
| | | 67.9 | 9.0 | 18.1 | 12.3 | 34.4 | 3.6 | 9.6 |
| Total for 6 cities..... | 1900 | 2, 237 | 33, 907, 505 | 21, 289 | 8, 856, 368 | 4, 018, 509 | 32, 461, 284 | 56, 414, 791 |
| Per cent of increase..... | 1890 | 1, 614 | 30, 104, 959 | 19, 112 | 8, 367, 191 | 2, 633, 730 | 31, 153, 493 | 50, 243, 733 |
| | | 33.6 | 29.2 | 11.4 | 7.0 | 52.6 | 4.2 | 12.3 |
| Per cent of 6 cities to total for state..... | 1900 | 15.1 | 37.9 | 36.4 | 37.4 | 50.3 | 32.1 | 34.3 |
| | 1890 | 21.7 | 33.8 | 37.4 | 41.0 | 45.9 | 39.3 | 40.2 |

¹ Decrease.

It appears from Table 4 that there has been a considerable increase during the past decade in the manufactures of the 6 principal cities of the state. The number of establishments increased from 1,614 to 2,237, or 38.6 per cent; the average number of wage-earners from 19,112 to 21,289, or 11.4 per cent; and the value of products from \$50,243,733 to \$56,414,791, or 12.3 per cent. In each of these particulars, however, the increase for these cities is less than for the state as a whole (see Table 3), showing that the development of manufactures has been more rapid in the smaller cities and towns of the state. The city of Des Moines shows the greatest growth, as measured by the value of products, which increased from \$7,931,272 in 1890 to \$10,488,189 in 1900, or 32.2 per cent. In Sioux

City, the leading manufacturing city in the state, the number of establishments increased during the decade from 196 to 329, or 67.9 per cent; the number of wage-earners from 2,629 to 3,104, or 18.1 per cent; and the value of products from \$14,119,843 to \$15,469,702, or 9.6 per cent. The number of establishments, the number of wage-earners, and the value of products, in this city in 1900, constituted 2.2, 5.3, and 9.4 per cent, respectively, of the totals for the entire state.

Table 5 presents the totals for the manufacturing industries of the 39 cities withdrawn from the enumerators, places them in comparison with the totals for the entire state and the state exclusive of these cities and shows their rank in products and in population.

TABLE 5.—URBAN MANUFACTURES.

| | Number of establishments. | Capital. | Proprietors and firm members. | WAGE-EARNERS. | | Miscellaneous expenses. | Cost of materials used. | PRODUCTS. | | | POPULATION. | | |
|---|---------------------------|---------------|-------------------------------|-----------------|--------------|-------------------------|-------------------------|---------------|-------|--------------------|-------------|-------|--------------------|
| | | | | Average number. | Total wages. | | | Value. | Rank. | Per cent of total. | Total. | Rank. | Per cent of total. |
| Total for state | 14,819 | \$102,733,103 | 16,619 | 58,553 | \$23,931,680 | \$7,988,767 | \$101,170,357 | \$164,617,677 | ----- | 100.0 | 12,231,468 | ----- | 100.0 |
| Total for urban manufactures. | 5,408 | 77,012,586 | 6,011 | 44,472 | 18,436,540 | 6,549,137 | 71,820,352 | 118,468,509 | ----- | 72.0 | 470,965 | ----- | 21.1 |
| Belle Plaine | 41 | 89,742 | 55 | 135 | 58,338 | 8,819 | 122,413 | 232,581 | 86 | 0.1 | 3,283 | 34 | 0.1 |
| Boone | 114 | 400,260 | 146 | 680 | 315,833 | 28,725 | 471,794 | 975,045 | 20 | 0.6 | 8,880 | 17 | 0.4 |
| Burlington | 340 | 5,235,624 | 353 | 2,593 | 1,013,998 | 414,319 | 2,869,536 | 5,334,196 | 9 | 3.2 | 23,201 | 7 | 1.0 |
| Cedar Falls | 67 | 658,605 | 75 | 315 | 123,030 | 55,380 | 673,000 | 1,049,557 | 18 | 0.6 | 5,319 | 21 | 0.2 |
| Cedar Rapids | 241 | 6,256,801 | 281 | 3,105 | 1,313,821 | 513,455 | 3,969,992 | 12,715,897 | 2 | 7.7 | 25,656 | 6 | 1.2 |
| Centerville | 54 | 173,910 | 59 | 203 | 82,667 | 14,695 | 168,272 | 341,169 | 31 | 0.2 | 5,256 | 22 | 0.2 |
| Chariton | 46 | 126,090 | 52 | 175 | 64,837 | 12,068 | 155,346 | 323,900 | 32 | 0.2 | 3,939 | 28 | 0.2 |
| Charles City | 61 | 288,313 | 73 | 184 | 77,479 | 15,021 | 281,804 | 433,985 | 23 | 0.3 | 4,227 | 25 | 0.2 |
| Clarinda | 44 | 126,706 | 57 | 85 | 33,449 | 9,434 | 179,996 | 373,000 | 39 | 0.1 | 3,276 | 35 | 0.1 |
| Clinton | 224 | 4,537,200 | 208 | 3,080 | 1,137,019 | 370,141 | 4,247,057 | 6,989,473 | 7 | 4.2 | 22,698 | 8 | 1.0 |
| Council Bluffs | 193 | 1,176,408 | 213 | 1,179 | 609,905 | 160,871 | 1,224,814 | 2,596,830 | 12 | 1.6 | 25,802 | 5 | 1.2 |
| Creese | 55 | 135,030 | 69 | 98 | 34,910 | 7,554 | 168,133 | 291,772 | 34 | 0.2 | 2,303 | 37 | 0.1 |
| Creston | 103 | 398,925 | 105 | 418 | 177,476 | 29,743 | 344,910 | 688,739 | 23 | 0.4 | 7,732 | 19 | 0.4 |
| Davenport | 416 | 10,774,707 | 456 | 4,343 | 1,892,737 | 855,397 | 6,854,677 | 11,673,870 | 3 | 7.0 | 35,254 | 3 | 1.6 |
| Decorah | 85 | 818,540 | 97 | 174 | 75,619 | 23,762 | 221,213 | 443,345 | 26 | 0.3 | 3,246 | 36 | 0.1 |
| Des Moines | 494 | 7,911,764 | 515 | 4,557 | 1,942,509 | 894,691 | 4,975,568 | 10,488,189 | 5 | 6.4 | 62,139 | 1 | 2.3 |
| Dubuque | 460 | 8,117,553 | 526 | 5,503 | 2,012,153 | 1,025,245 | 5,950,017 | 10,952,204 | 4 | 6.7 | 36,207 | 2 | 1.6 |
| Fort Dodge | 88 | 908,834 | 88 | 527 | 224,124 | 38,642 | 793,265 | 1,263,385 | 16 | 0.8 | 12,162 | 13 | 0.5 |
| Fort Madison | 83 | 1,546,574 | 75 | 966 | 403,351 | 95,465 | 870,482 | 1,737,254 | 14 | 1.1 | 9,273 | 15 | 0.4 |
| Grinnell | 81 | 812,940 | 102 | 334 | 145,664 | 37,045 | 426,632 | 1,004,642 | 19 | 0.6 | 3,350 | 29 | 0.2 |
| Independence | 57 | 312,405 | 56 | 159 | 67,375 | 14,766 | 163,291 | 314,179 | 33 | 0.2 | 3,656 | 31 | 0.2 |
| Iowa City | 129 | 1,003,909 | 130 | 680 | 299,314 | 89,077 | 781,730 | 1,511,065 | 15 | 0.9 | 7,987 | 18 | 0.4 |
| Keokuk | 188 | 2,103,335 | 197 | 1,665 | 614,580 | 190,578 | 1,882,237 | 3,669,047 | 11 | 2.2 | 14,641 | 10 | 0.7 |
| Le Mars | 69 | 555,662 | 73 | 190 | 55,816 | 52,658 | 680,859 | 958,680 | 21 | 0.6 | 4,146 | 26 | 0.2 |
| Marion | 55 | 113,970 | 69 | 79 | 65,066 | 9,327 | 117,978 | 244,545 | 35 | 0.2 | 4,102 | 27 | 0.2 |
| Marshalltown | 147 | 5,866,270 | 170 | 1,399 | 654,227 | 190,154 | 3,120,658 | 4,587,240 | 10 | 2.8 | 11,544 | 14 | 0.5 |
| Mason City | 89 | 351,868 | 103 | 376 | 187,211 | 21,013 | 330,110 | 705,460 | 22 | 0.4 | 6,746 | 20 | 0.3 |
| Muscatine | 247 | 3,725,971 | 295 | 2,385 | 1,055,904 | 212,703 | 3,773,379 | 5,791,110 | 8 | 3.5 | 14,073 | 11 | 0.6 |
| Newton | 86 | 443,133 | 106 | 312 | 121,831 | 44,768 | 244,402 | 666,727 | 25 | 0.4 | 3,682 | 30 | 0.2 |
| Oelwein | 37 | 614,599 | 41 | 511 | 279,922 | 10,081 | 337,360 | 674,637 | 24 | 0.4 | 5,142 | 23 | 0.2 |
| Osage | 37 | 82,090 | 45 | 68 | 29,895 | 6,795 | 120,174 | 202,405 | 37 | 0.1 | 2,734 | 39 | 0.1 |
| Oskaloosa | 143 | 552,230 | 171 | 583 | 262,223 | 67,753 | 490,932 | 1,063,584 | 17 | 0.7 | 9,212 | 16 | 0.4 |
| Ottumwa | 190 | 3,403,321 | 188 | 2,085 | 804,215 | 200,073 | 7,093,068 | 9,129,862 | 6 | 5.5 | 13,197 | 9 | 0.8 |
| Shenandoah | 56 | 236,623 | 65 | 213 | 87,078 | 12,076 | 200,213 | 382,740 | 30 | 0.2 | 3,573 | 32 | 0.2 |
| Sioux City | 329 | 5,691,644 | 376 | 3,104 | 1,435,056 | 664,486 | 10,669,672 | 15,469,702 | 1 | 9.4 | 33,111 | 4 | 1.5 |
| Vinton | 63 | 198,237 | 81 | 231 | 76,001 | 31,384 | 206,150 | 440,137 | 27 | 0.3 | 3,499 | 33 | 0.2 |
| Waterloo | 147 | 1,287,056 | 142 | 1,042 | 471,608 | 81,642 | 1,555,578 | 2,499,331 | 13 | 1.5 | 12,580 | 12 | 0.6 |
| Webster City | 33 | 343,455 | 36 | 205 | 73,297 | 16,863 | 188,170 | 415,163 | 29 | 0.3 | 4,613 | 24 | 0.2 |
| What Cheer | 41 | 132,408 | 51 | 53 | 25,927 | 6,578 | 93,167 | 184,436 | 33 | 0.1 | 2,746 | 38 | 0.1 |
| Total for state exclusive of urban manufactures | 9,411 | 25,720,517 | 10,608 | 14,081 | 5,495,140 | 1,439,630 | 29,350,005 | 46,149,368 | ----- | ----- | 1,761,103 | ----- | ----- |
| Per cent of urban manufactures to total for state | 36.5 | 75.0 | 36.2 | 76.0 | 77.0 | 82.0 | 71.0 | 72.0 | ----- | 280.0 | ----- | ----- | 73.9 |

¹ Exclusive of 385 Indians and other persons on Indian reservations, which classes were not included at previous censuses.

Of the 14,819 establishments in the state, 5,408, or 36.5 per cent, were located in these 39 cities. The capital reported for these establishments was \$77,012,586, or 75 per cent of that for the entire state. They furnished employment to 44,472 wage-earners, or 76 per cent of the total for the state; paid \$18,436,540, or 77 per cent of the total wages; and the value of their products, \$118,468,509, formed 72 per cent of the total for the state.

Table 6 shows the totals for the state by counties.

Table 7 shows the totals for the state by specified industries.

Table 8 shows the totals for the cities of Burlington, Cedar Rapids, Clinton, Council Bluffs, Davenport, Des Moines, Dubuque, and Sioux City, by specified industries.

Table 9 shows the totals for all industries in the cities withdrawn from the enumerators, exclusive of those shown in Table 8.

TABLE 6.—MANUFACTURES

| COUNTIES. | Number of establishments. | CAPITAL. | | | | | Proprietors and firm members. | SALARIED OFFICIALS, CLERKS, ETC. | | AVERAGE NUMBER OF WAGE-EARNERS AND TOTAL WAGES. | |
|----------------|---------------------------|---------------|--------------|--------------|-----------------------------------|--------------------|-------------------------------|----------------------------------|-------------|---|--------------|
| | | Total. | Land. | Buildings. | Machinery, tools, and implements. | Cash and sundries. | | Number. | Salaries. | Total. | |
| | | | | | | | | | | Average number. | Wages. |
| 1 The State | 14,810 | \$102,738,103 | \$11,701,330 | \$18,554,185 | \$26,150,011 | \$46,327,577 | 16,610 | 5,664 | \$4,486,117 | 58,553 | \$23,931,630 |
| 2 Adair | 77 | 122,026 | 7,908 | 36,741 | 44,785 | 32,597 | 95 | 3 | 864 | 68 | 24,001 |
| 3 Adams | 59 | 160,487 | 21,130 | 27,385 | 59,255 | 52,767 | 67 | 6 | 3,176 | 79 | 29,475 |
| 4 Allamakee | 116 | 365,709 | 40,666 | 85,971 | 101,897 | 137,175 | 135 | 18 | 4,809 | 211 | 80,809 |
| 5 Appanoose | 125 | 252,600 | 33,780 | 57,655 | 101,523 | 64,702 | 138 | 17 | 8,851 | 246 | 96,533 |
| 6 Audubon | 62 | 182,450 | 10,190 | 30,465 | 47,760 | 44,035 | 64 | 7 | 627 | 80 | 32,164 |
| 7 Benton | 188 | 466,102 | 52,090 | 123,850 | 123,084 | 167,128 | 217 | 21 | 11,872 | 466 | 166,212 |
| 8 Blackhawk | 274 | 2,104,542 | 238,214 | 366,196 | 524,334 | 915,798 | 278 | 152 | 105,978 | 1,435 | 625,649 |
| 9 Boone | 184 | 536,701 | 61,010 | 78,400 | 135,726 | 261,535 | 224 | 38 | 21,322 | 782 | 346,234 |
| 10 Bremer | 145 | 400,822 | 45,240 | 105,060 | 118,401 | 132,181 | 152 | 38 | 7,262 | 189 | 71,411 |
| 11 Buchanan | 163 | 506,090 | 60,190 | 102,475 | 174,620 | 168,805 | 172 | 20 | 8,282 | 254 | 96,481 |
| 12 Buena Vista | 107 | 235,566 | 29,060 | 59,014 | 78,855 | 68,637 | 124 | 8 | 3,810 | 102 | 42,112 |
| 13 Butler | 140 | 334,378 | 35,155 | 82,855 | 93,714 | 122,154 | 149 | 20 | 8,273 | 116 | 49,483 |
| 14 Calhoun | 119 | 268,701 | 30,700 | 43,040 | 80,740 | 114,113 | 184 | 9 | 5,555 | 205 | 100,244 |
| 15 Carroll | 125 | 327,945 | 28,868 | 54,760 | 97,802 | 147,020 | 129 | 10 | 5,717 | 152 | 63,454 |
| 16 Cass | 138 | 386,434 | 42,355 | 74,475 | 102,640 | 167,014 | 183 | 7 | 3,680 | 285 | 109,111 |
| 17 Cedar | 125 | 449,209 | 50,215 | 98,430 | 129,390 | 165,174 | 145 | 5 | 3,520 | 238 | 117,100 |
| 18 Cerro Gordo | 162 | 510,319 | 72,740 | 105,502 | 137,108 | 194,969 | 189 | 80 | 20,586 | 425 | 185,226 |
| 19 Cherokee | 88 | 214,786 | 22,690 | 45,815 | 70,997 | 75,784 | 92 | 2 | 1,400 | 96 | 43,320 |
| 20 Chickasaw | 188 | 299,617 | 33,071 | 67,823 | 98,072 | 100,651 | 136 | 22 | 5,968 | 157 | 58,927 |
| 21 Clarke | 38 | 87,688 | 14,850 | 12,855 | 27,600 | 32,881 | 45 | 6 | 2,100 | 46 | 20,220 |
| 22 Clay | 53 | 167,613 | 24,615 | 36,410 | 59,227 | 47,361 | 61 | 5 | 3,800 | 56 | 21,268 |
| 23 Clayton | 218 | 644,521 | 37,555 | 104,840 | 194,390 | 307,736 | 235 | 29 | 8,403 | 362 | 119,262 |
| 24 Clinton | 320 | 4,756,638 | 516,496 | 387,261 | 811,423 | 8,011,453 | 819 | 207 | 235,512 | 3,147 | 1,161,486 |
| 25 Crawford | 77 | 222,037 | 24,030 | 46,165 | 74,760 | 77,082 | 90 | 1 | 1,000 | 94 | 34,863 |
| 26 Dallas | 124 | 316,986 | 22,355 | 76,505 | 103,430 | 108,695 | 158 | 8 | 5,648 | 152 | 58,099 |
| 27 Davis | 87 | 164,959 | 32,100 | 23,665 | 58,722 | 50,472 | 105 | 6 | 1,532 | 114 | 30,786 |
| 28 Decatur | 92 | 203,383 | 16,915 | 49,230 | 61,503 | 75,735 | 109 | 8 | 3,630 | 103 | 35,155 |
| 29 Delaware | 155 | 415,434 | 52,825 | 104,170 | 133,565 | 124,874 | 159 | 28 | 8,119 | 222 | 92,157 |
| 30 Des Moines | 370 | 5,074,811 | 1,321,484 | 669,505 | 1,383,863 | 2,239,954 | 890 | 338 | 228,417 | 3,178 | 1,808,537 |
| 31 Dickinson | 54 | 163,884 | 15,063 | 33,300 | 57,595 | 57,905 | 65 | 1 | 150 | 42 | 20,763 |
| 32 Dubuque | 609 | 8,473,553 | 900,837 | 1,354,364 | 1,342,822 | 4,880,530 | 675 | 612 | 459,393 | 5,662 | 2,076,898 |
| 33 Emmet | 51 | 176,162 | 9,004 | 41,325 | 53,853 | 72,380 | 53 | 8 | 2,530 | 69 | 32,343 |
| 34 Fayette | 220 | 1,022,954 | 65,940 | 481,804 | 257,715 | 277,495 | 245 | 35 | 15,320 | 742 | 349,890 |
| 35 Floyd | 118 | 411,891 | 69,755 | 91,002 | 108,146 | 142,988 | 134 | 12 | 5,896 | 253 | 101,770 |
| 36 Franklin | 56 | 165,013 | 16,525 | 28,275 | 66,044 | 53,569 | 62 | 5 | 2,315 | 58 | 26,337 |
| 37 Fremont | 120 | 249,046 | 25,501 | 45,870 | 89,429 | 88,246 | 153 | 3 | 1,100 | 135 | 43,492 |
| 38 Greene | 85 | 239,632 | 26,450 | 65,037 | 64,787 | 83,328 | 109 | 6 | 4,120 | 137 | 59,950 |
| 39 Grundy | 86 | 178,286 | 11,430 | 49,470 | 57,218 | 60,113 | 107 | 2 | 840 | 65 | 27,216 |
| 40 Guthrie | 104 | 275,509 | 20,590 | 75,970 | 92,743 | 86,206 | 114 | 5 | 1,370 | 158 | 51,226 |
| 41 Hamilton | 86 | 467,471 | 42,270 | 105,573 | 129,352 | 190,276 | 91 | 29 | 15,942 | 261 | 98,434 |
| 42 Hancock | 79 | 173,703 | 20,400 | 44,210 | 56,283 | 52,810 | 80 | 6 | 1,400 | 75 | 31,048 |
| 43 Hardin | 195 | 520,276 | 63,840 | 107,423 | 167,364 | 182,149 | 223 | 14 | 5,529 | 285 | 123,546 |
| 44 Harrison | 125 | 303,191 | 30,200 | 66,760 | 87,972 | 123,169 | 130 | 18 | 11,243 | 569 | 274,649 |
| 45 Henry | 136 | 347,855 | 21,780 | 65,347 | 143,191 | 112,537 | 163 | 13 | 7,121 | 181 | 59,551 |
| 46 Howard | 116 | 283,803 | 20,569 | 66,600 | 76,050 | 120,589 | 139 | 13 | 5,803 | 145 | 53,398 |
| 47 Humboldt | 95 | 239,377 | 21,295 | 54,025 | 86,328 | 78,229 | 96 | 12 | 3,860 | 76 | 30,833 |
| 48 Ida | 72 | 265,996 | 21,190 | 49,175 | 75,090 | 120,541 | 88 | 4 | 2,423 | 94 | 35,037 |
| 49 Iowa | 114 | 247,048 | 23,045 | 65,870 | 83,480 | 74,613 | 142 | 7 | 2,091 | 112 | 43,259 |
| 50 Jackson | 207 | 655,345 | 64,514 | 128,535 | 201,349 | 260,947 | 228 | 23 | 9,666 | 404 | 158,629 |
| 51 Jasper | 185 | 684,469 | 41,410 | 82,143 | 181,159 | 419,767 | 210 | 70 | 46,680 | 405 | 156,667 |
| 52 Jefferson | 76 | 537,929 | 21,700 | 61,020 | 120,209 | 335,000 | 83 | 27 | 13,164 | 230 | 84,642 |
| 53 Johnson | 184 | 1,275,968 | 107,810 | 219,440 | 358,001 | 590,717 | 138 | 165 | 72,529 | 747 | 324,109 |
| 54 Jones | 169 | 668,490 | 63,242 | 162,383 | 177,166 | 165,699 | 179 | 17 | 6,668 | 303 | 111,853 |
| 55 Keokuk | 181 | 377,600 | 32,825 | 101,540 | 106,102 | 137,133 | 231 | 18 | 9,391 | 233 | 93,069 |
| 56 Kossuth | 86 | 258,163 | 21,830 | 62,073 | 87,775 | 84,490 | 80 | 17 | 3,723 | 99 | 46,166 |
| 57 Lee | 329 | 4,192,064 | 237,730 | 609,573 | 990,822 | 2,353,939 | 341 | 426 | 533,955 | 2,842 | 1,104,743 |
| 58 Linn | 470 | 6,657,981 | 509,865 | 1,411,522 | 1,541,733 | 3,194,856 | 546 | 341 | 289,103 | 3,390 | 1,424,523 |
| 59 Louisa | 48 | 153,117 | 9,200 | 32,200 | 36,070 | 30,047 | 53 | 7 | 3,135 | 155 | 44,171 |
| 60 Lucas | 78 | 157,642 | 11,570 | 23,647 | 36,363 | 36,037 | 85 | 8 | 5,049 | 200 | 73,487 |
| 61 Lyon | 68 | 199,763 | 16,940 | 44,006 | 63,045 | 70,172 | 75 | 1 | 600 | 59 | 28,806 |
| 62 Madison | 90 | 156,011 | 16,700 | 25,280 | 44,031 | 70,000 | 101 | 6 | 1,827 | 137 | 52,645 |
| 63 Mahaska | 200 | 672,334 | 67,005 | 110,705 | 182,113 | 312,951 | 239 | 52 | 30,794 | 653 | 234,072 |
| 64 Marion | 123 | 408,254 | 27,845 | 60,700 | 100,523 | 219,131 | 152 | 15 | 6,111 | 227 | 65,525 |
| 65 Marshall | 226 | 6,245,481 | 1,507,980 | 1,056,605 | 1,617,785 | 1,263,061 | 262 | 116 | 115,946 | 1,715 | 742,979 |
| 66 Mills | 78 | 175,701 | 18,330 | 42,000 | 64,524 | 55,347 | 84 | 8 | 4,832 | 145 | 54,338 |
| 67 Mitchell | 96 | 225,768 | 33,585 | 53,010 | 72,800 | 66,373 | 105 | 11 | 4,600 | 130 | 50,667 |
| 68 Monona | 75 | 172,517 | 13,175 | 35,100 | 49,430 | 50,762 | 85 | 2 | 813 | 52 | 19,030 |
| 69 Monroe | 82 | 130,066 | 10,685 | 24,840 | 38,523 | 56,516 | 91 | 3 | 1,650 | 113 | 42,558 |
| 70 Montgomery | 127 | 414,032 | 30,440 | 91,300 | 132,846 | 159,446 | 149 | 20 | 12,189 | 260 | 94,247 |
| 71 Muscatine | 315 | 3,880,703 | 231,745 | 343,051 | 724,847 | 2,587,000 | 377 | 141 | 132,375 | 2,920 | 1,039,760 |
| 72 O'Brien | 108 | 327,134 | 22,075 | 67,000 | 96,153 | 141,901 | 117 | 6 | 3,910 | 119 | 41,905 |
| 73 Osceola | 44 | 90,874 | 11,250 | 24,255 | 30,476 | 24,893 | 47 | | | 37 | 14,869 |
| 74 Page | 176 | 497,915 | 65,060 | 103,547 | 141,302 | 193,006 | 208 | 14 | 7,716 | 362 | 144,153 |
| 75 Palo Alto | 101 | 248,377 | 23,849 | 47,905 | 73,784 | 102,739 | 106 | 20 | 5,356 | 143 | 57,731 |
| 76 Plymouth | 141 | 769,499 | 133,130 | 174,010 | 219,382 | 242,427 | 140 | 33 | 20,075 | 259 | 109,574 |

BY COUNTIES: 1900.

| AVERAGE NUMBER OF WAGE-EARNERS AND TOTAL WAGES—continued. | | | | | | MISCELLANEOUS EXPENSES. | | | | | COST OF MATERIALS USED. | | | Value of products, including custom work and repairing. | |
|---|--------------|---------------------------|-------------|---------------------------|-----------|-------------------------|----------------|--|---------------------------------|----------------|-------------------------|---|----------------------------------|---|----|
| Men, 16 years and over. | | Women, 16 years and over. | | Children, under 16 years. | | Total. | Rent of works. | Taxes, not including internal revenue. | Rent of offices, interest, etc. | Contract work. | Total. | Principal materials, including mill supplies and freight. | Fuel and rent of power and heat. | | |
| Average number. | Wages. | Average number. | Wages. | Average number. | Wages. | | | | | | | | | | |
| 48,417 | \$21,893,988 | 8,248 | \$1,766,858 | 1,888 | \$270,839 | \$7,988,767 | \$1,166,879 | \$547,635 | \$5,592,216 | \$682,087 | \$101,170,357 | \$98,911,434 | \$2,258,923 | \$164,017,877 | 1 |
| 55 | 21,509 | 9 | 1,998 | 4 | 589 | 9,158 | 2,751 | 771 | 5,528 | 108 | 162,882 | 157,474 | 5,858 | 236,923 | 2 |
| 68 | 26,706 | 10 | 2,719 | 1 | 50 | 10,371 | 2,765 | 755 | 6,851 | | 235,504 | 228,284 | 7,220 | 339,404 | 3 |
| 195 | 76,845 | 14 | 3,558 | 2 | 406 | 18,266 | 5,285 | 1,884 | 10,892 | 285 | 480,121 | 422,550 | 7,771 | 682,479 | 4 |
| 198 | 87,728 | 17 | 8,007 | 7 | 800 | 18,019 | 4,576 | 2,524 | 5,669 | 5,250 | 215,921 | 207,558 | 8,868 | 447,415 | 5 |
| 62 | 29,446 | 41 | 2,628 | 1 | 90 | 7,543 | 3,017 | 998 | 3,513 | 25 | 274,815 | 263,104 | 6,711 | 886,073 | 6 |
| 375 | 147,398 | 75 | 16,249 | 16 | 2,565 | 49,384 | 7,544 | 3,198 | 34,880 | 3,762 | 529,189 | 511,778 | 17,411 | 988,908 | 7 |
| 1,210 | 584,698 | 196 | 36,710 | 29 | 4,241 | 144,504 | 29,097 | 13,884 | 101,737 | 286 | 2,641,551 | 2,604,766 | 86,785 | 4,071,821 | 8 |
| 664 | 329,615 | 68 | 14,005 | 30 | 2,614 | 83,702 | 15,911 | 4,350 | 18,006 | 435 | 601,547 | 577,834 | 24,213 | 1,194,270 | 9 |
| 162 | 65,430 | 19 | 4,660 | 8 | 1,321 | 19,344 | 6,799 | 1,747 | 9,911 | 887 | 681,321 | 668,066 | 13,255 | 929,293 | 10 |
| 215 | 90,070 | 28 | 4,975 | 11 | 1,436 | 22,514 | 7,166 | 2,730 | 12,468 | 150 | 654,684 | 641,759 | 12,876 | 959,277 | 11 |
| 85 | 88,988 | 16 | 3,124 | 1 | 50 | 13,058 | 4,413 | 1,325 | 7,145 | 170 | 318,791 | 307,840 | 10,951 | 469,623 | 12 |
| 93 | 45,281 | 15 | 3,842 | 3 | 360 | 19,070 | 6,411 | 1,944 | 10,565 | 150 | 581,932 | 569,635 | 12,297 | 796,660 | 13 |
| 174 | 94,260 | 22 | 4,829 | 9 | 1,155 | 14,029 | 5,271 | 1,732 | 6,778 | 250 | 295,359 | 288,904 | 6,455 | 509,407 | 14 |
| 206 | 56,864 | 22 | 5,260 | 10 | 1,330 | 19,674 | 6,454 | 1,606 | 11,614 | | 327,212 | 319,269 | 7,943 | 548,486 | 15 |
| 120 | 55,560 | 70 | 11,760 | 9 | 1,791 | 27,305 | 9,654 | 2,977 | 14,671 | 10 | 490,238 | 481,203 | 9,085 | 817,079 | 16 |
| 211 | 112,571 | 17 | 3,404 | 5 | 1,185 | 15,591 | 5,197 | 2,136 | 5,298 | 2,960 | 288,958 | 274,455 | 14,503 | 548,252 | 17 |
| 865 | 173,280 | 57 | 11,729 | 3 | 217 | 26,999 | 9,092 | 3,066 | 13,716 | 1,125 | 443,220 | 422,154 | 21,066 | 899,879 | 18 |
| 80 | 39,958 | 15 | 3,137 | 1 | 225 | 16,372 | 4,662 | 1,253 | 10,457 | | 167,910 | 160,814 | 7,096 | 811,632 | 19 |
| 130 | 53,486 | 24 | 5,054 | 3 | 387 | 20,483 | 4,667 | 1,791 | 11,188 | 2,839 | 683,371 | 670,519 | 12,852 | 912,868 | 20 |
| 40 | 19,395 | 5 | 700 | 1 | 125 | 4,909 | 1,079 | 657 | 2,545 | 25 | 83,613 | 80,903 | 2,710 | 151,847 | 21 |
| 48 | 20,358 | 3 | 870 | 5 | 540 | 9,093 | 1,568 | 1,199 | 4,825 | 1,501 | 240,963 | 235,866 | 5,097 | 340,449 | 22 |
| 327 | 113,189 | 29 | 5,469 | 6 | 604 | 25,844 | 7,219 | 2,852 | 15,073 | 700 | 1,060,045 | 1,045,656 | 14,389 | 212,368 | 23 |
| 2,794 | 1,090,863 | 254 | 53,164 | 99 | 17,459 | 377,521 | 82,807 | 50,704 | 290,460 | 3,550 | 4,469,469 | 4,400,940 | 68,529 | 7,265,252 | 24 |
| 80 | 32,411 | 9 | 1,937 | 5 | 515 | 11,115 | 3,756 | 1,647 | 5,692 | 120 | 241,021 | 229,685 | 11,336 | 387,232 | 25 |
| 128 | 48,160 | 19 | 4,221 | 5 | 718 | 18,989 | 5,375 | 1,792 | 10,982 | 340 | 302,710 | 285,774 | 16,936 | 510,968 | 26 |
| 82 | 26,156 | 28 | 4,290 | 4 | 340 | 8,215 | 3,264 | 981 | 3,780 | 240 | 95,026 | 92,827 | 2,199 | 208,037 | 27 |
| 83 | 34,006 | 14 | 3,305 | 6 | 814 | 10,044 | 3,012 | 1,089 | 5,793 | 150 | 98,050 | 88,342 | 4,708 | 212,368 | 28 |
| 180 | 85,305 | 37 | 6,325 | 5 | 527 | 21,969 | 8,399 | 1,971 | 16,599 | | 758,979 | 743,426 | 16,553 | 1,085,520 | 29 |
| 2,774 | 1,239,860 | 315 | 66,994 | 89 | 12,153 | 450,503 | 93,598 | 30,648 | 332,371 | 33,631 | 8,247,247 | 8,181,804 | 65,943 | 6,146,776 | 30 |
| 37 | 19,274 | 3 | 1,260 | 2 | 229 | 6,447 | 2,206 | 1,086 | 2,648 | 507 | 207,178 | 200,164 | 7,014 | 290,062 | 31 |
| 4,888 | 1,846,411 | 1,164 | 211,778 | 115 | 18,209 | 1,044,201 | 90,738 | 54,688 | 785,227 | 113,548 | 6,366,965 | 6,261,987 | 104,978 | 11,614,240 | 32 |
| 65 | 31,841 | 4 | 1,002 | | | 9,908 | 3,477 | 851 | 4,880 | 700 | 163,845 | 157,285 | 6,110 | 242,372 | 33 |
| 674 | 338,335 | 49 | 9,368 | 19 | 1,697 | 87,856 | 10,911 | 3,289 | 23,890 | 666 | 1,065,235 | 1,034,779 | 30,456 | 1,729,214 | 34 |
| 226 | 96,380 | 20 | 4,884 | 7 | 506 | 20,976 | 6,833 | 2,852 | 12,225 | 530 | 393,908 | 383,781 | 9,527 | 666,717 | 35 |
| 261 | 24,067 | 7 | 2,320 | | | 8,220 | 2,811 | 839 | 6,070 | | 184,587 | 178,908 | 6,629 | 278,293 | 36 |
| 110 | 89,740 | 17 | 2,873 | 8 | 879 | 13,768 | 4,568 | 1,739 | 7,296 | 200 | 194,662 | 184,299 | 10,363 | 351,889 | 37 |
| 104 | 53,245 | 33 | 6,705 | | | 10,577 | 4,106 | 1,352 | 4,899 | 310 | 220,266 | 211,275 | 8,991 | 388,633 | 38 |
| 57 | 25,120 | 7 | 1,920 | 1 | 175 | 10,514 | 4,651 | 1,080 | 4,753 | 30 | 322,298 | 313,883 | 8,465 | 450,816 | 39 |
| 125 | 45,882 | 20 | 3,302 | 12 | 1,542 | 15,516 | 4,373 | 1,700 | 9,282 | 160 | 312,045 | 299,452 | 12,593 | 489,673 | 40 |
| 218 | 80,383 | 17 | 5,586 | 16 | 2,465 | 22,156 | 4,815 | 2,175 | 15,966 | | 416,266 | 393,155 | 23,110 | 718,466 | 41 |
| 59 | 29,520 | 15 | 1,498 | 1 | 30 | 8,149 | 3,126 | 1,174 | 3,832 | 17 | 166,933 | 162,161 | 4,772 | 271,219 | 42 |
| 248 | 120,274 | 35 | 8,097 | 2 | 169 | 35,029 | 7,761 | 3,393 | 15,245 | 8,025 | 654,819 | 670,411 | 14,408 | 1,060,422 | 43 |
| 523 | 267,709 | 34 | 6,070 | 9 | 870 | 10,413 | 0,293 | 2,664 | 7,576 | 40 | 499,232 | 407,500 | 21,672 | 898,661 | 44 |
| 185 | 52,881 | 37 | 5,814 | 9 | 956 | 24,951 | 10,051 | 2,102 | 11,658 | 1,140 | 219,567 | 210,152 | 9,405 | 414,965 | 45 |
| 180 | 60,095 | 11 | 2,506 | 4 | 737 | 13,119 | 4,474 | 1,720 | 6,303 | 622 | 407,694 | 400,424 | 8,270 | 681,087 | 46 |
| 62 | 28,228 | 11 | 1,805 | 3 | 305 | 9,943 | 2,430 | 1,536 | 5,860 | 117 | 285,218 | 277,924 | 7,294 | 423,798 | 47 |
| 79 | 84,956 | 12 | 2,731 | 3 | 400 | 11,143 | 3,435 | 1,605 | 6,028 | 75 | 317,029 | 309,122 | 7,907 | 463,223 | 48 |
| 101 | 41,030 | 8 | 1,678 | 3 | 584 | 13,188 | 3,598 | 1,537 | 7,607 | 446 | 231,209 | 219,290 | 11,919 | 368,795 | 49 |
| 357 | 148,255 | 43 | 9,408 | 4 | 966 | 43,660 | 7,815 | 3,794 | 38,649 | 3,793 | 620,490 | 607,420 | 13,070 | 971,117 | 50 |
| 809 | 141,866 | 91 | 14,269 | 5 | 532 | 64,060 | 10,938 | 4,122 | 37,367 | 11,633 | 430,250 | 410,653 | 18,597 | 990,950 | 51 |
| 183 | 77,246 | 34 | 6,795 | 13 | 601 | 26,510 | 4,807 | 1,741 | 19,962 | | 297,453 | 281,654 | 15,799 | 549,829 | 52 |
| 598 | 297,287 | 136 | 24,044 | 13 | 2,173 | 98,149 | 18,420 | 6,403 | 72,501 | 825 | 865,459 | 847,830 | 17,629 | 1,075,869 | 53 |
| 248 | 99,929 | 47 | 10,400 | 13 | 1,524 | 26,617 | 3,019 | 3,171 | 14,282 | 1,145 | 780,735 | 762,895 | 17,840 | 1,120,533 | 54 |
| 203 | 86,973 | 23 | 5,303 | 7 | 793 | 18,333 | 6,599 | 2,457 | 9,092 | 135 | 290,050 | 277,941 | 12,109 | 533,935 | 55 |
| 87 | 44,012 | 6 | 1,335 | 6 | 819 | 12,755 | 3,119 | 1,764 | 7,847 | 525 | 465,582 | 454,297 | 11,285 | 606,940 | 56 |
| 2,266 | 985,368 | 485 | 106,795 | 91 | 12,585 | 325,663 | 30,603 | 23,900 | 208,594 | 59,506 | 3,090,156 | 3,020,899 | 75,757 | 5,907,571 | 57 |
| 2,780 | 1,295,770 | 475 | 103,808 | 135 | 24,945 | 545,593 | 54,057 | 20,340 | 418,924 | 52,572 | 9,513,005 | 9,399,515 | 113,790 | 13,632,423 | 58 |
| 102 | 34,687 | 20 | 4,730 | 33 | 4,704 | 7,173 | 2,364 | 900 | 3,599 | 15 | 152,820 | 148,131 | 4,689 | 298,390 | 59 |
| 167 | 68,392 | 28 | 4,595 | 5 | 430 | 14,015 | 6,286 | 859 | 5,670 | 1,200 | 181,406 | 176,836 | 4,630 | 377,501 | 60 |
| 57 | 27,276 | 3 | 630 | 6 | 900 | 9,435 | 3,462 | 1,277 | 4,384 | 312 | 306,244 | 300,969 | 5,275 | 446,012 | 61 |
| 114 | 48,514 | 17 | 3,571 | 6 | 560 | 17,677 | 5,068 | 926 | 4,188 | 7,460 | 112,730 | 109,869 | 2,870 | 258,364 | 62 |
| 594 | 257,964 | 94 | 23,289 | 25 | 2,819 | 72,643 | 19,689 | 4,197 | 35,532 | 13,225 | 546,837 | 546,837 | 19,232 | 1,138,237 | 63 |
| 176 | 58,090 | 34 | 6,591 | 17 | 1,341 | 13,479 | 4,249 | 2,278 | 11,632 | 300 | 244,775 | 237,579 | 7,196 | 400,551 | 64 |
| 1,570 | 718,099 | 120 | 24,211 | 25 | 2,639 | 209,909 | 24,131 | 10,350 | 176,318 | 110 | 3,392,079 | 3,265,085 | 126,994 | 5,086,255 | 65 |
| 96 | 40,319 | 40 | 11,779 | 9 | 1,740 | 10,465 | 4,029 | 962 | 6,474 | | 116,151 | 116,151 | 5,965 | 305,623 | 66 |
| 109 | 47,064 | 15 | 2,963 | 6 | 640 | 12,553 | 3,237 | 1,068 | 8,245 | | 400,716 | 483,800 | | | |

TABLE 6.—MANUFACTURES

| COUNTIES AND MANUFACTURING AND MECHANICAL INDUSTRIES. | Number of establishments. | CAPITAL. | | | | | Proprietors and firm members. | SALARIED OFFICIALS, CLERKS, ETC. | | AVERAGE NUMBER OF WAGE-EARNERS AND TOTAL WAGES. | |
|---|---------------------------|------------|-----------|------------|-----------------------------------|--------------------|-------------------------------|----------------------------------|-----------|---|-----------|
| | | Total. | Land. | Buildings. | Machinery, tools, and implements. | Cash and sundries. | | Number. | Salaries. | Total. | |
| | | | | | | | | | | Average number. | Wages. |
| 77 Pocahontas..... | 76 | \$176,039 | \$16,580 | \$41,555 | \$60,786 | \$57,218 | 88 | 72 | \$180 | 77 | \$30,295 |
| 78 Polk..... | 547 | 8,050,689 | 576,157 | 934,341 | 2,398,147 | 4,142,044 | 569 | 742 | 606,010 | 4,750 | 2,058,095 |
| 79 Pottawattamie..... | 324 | 1,425,472 | 134,050 | 293,755 | 451,158 | 604,509 | 355 | 184 | 116,844 | 1,282 | 652,164 |
| 80 Poweshiek..... | 144 | 961,275 | 26,707 | 74,378 | 98,373 | 761,812 | 176 | 84 | 23,807 | 339 | 166,355 |
| 81 Ringgold..... | 76 | 8,960 | 8,960 | 19,765 | 29,540 | 28,750 | 91 | 2 | 198 | 48 | 18,486 |
| 82 Sac..... | 115 | 264,203 | 21,755 | 63,154 | 89,745 | 89,549 | 135 | 4 | 1,146 | 88 | 36,640 |
| 83 Scott..... | 470 | 10,990,549 | 1,904,188 | 2,227,351 | 2,980,196 | 3,878,814 | 517 | 462 | 457,338 | 4,410 | 1,918,598 |
| 84 Shelby..... | 72 | 150,115 | 11,947 | 30,300 | 55,338 | 52,530 | 70 | 10 | 2,200 | 70 | 28,588 |
| 85 Sioux..... | 145 | 877,886 | 32,660 | 95,235 | 112,793 | 137,198 | 162 | 12 | 7,070 | 169 | 67,341 |
| 86 Story..... | 148 | 342,645 | 29,715 | 80,500 | 96,780 | 135,650 | 169 | 15 | 4,008 | 175 | 72,968 |
| 87 Tama..... | 147 | 529,082 | 70,505 | 107,120 | 222,088 | 129,374 | 182 | 20 | 10,960 | 820 | 122,137 |
| 88 Taylor..... | 117 | 170,907 | 15,523 | 37,475 | 54,896 | 63,013 | 130 | 3 | 410 | 123 | 19,650 |
| 89 Union..... | 137 | 451,870 | 30,465 | 144,642 | 174,470 | 102,283 | 140 | 32 | 28,725 | 457 | 191,129 |
| 90 Van Buren..... | 124 | 594,371 | 37,785 | 116,997 | 164,581 | 275,098 | 158 | 30 | 22,841 | 849 | 100,858 |
| 91 Wapello..... | 208 | 3,472,604 | 99,670 | 667,780 | 477,623 | 2,327,681 | 250 | 211 | 178,538 | 2,136 | 819,579 |
| 92 Warren..... | 103 | 205,941 | 28,607 | 43,625 | 58,686 | 75,073 | 131 | 4 | 1,900 | 106 | 35,242 |
| 93 Washington..... | 137 | 442,276 | 47,735 | 92,375 | 101,649 | 139,917 | 157 | 10 | 3,910 | 283 | 105,948 |
| 94 Wayne..... | 102 | 196,345 | 18,805 | 41,805 | 57,050 | 79,185 | 130 | 8 | 2,465 | 121 | 42,549 |
| 95 Webster..... | 172 | 1,536,942 | 150,654 | 343,725 | 564,059 | 478,504 | 177 | 121 | 84,034 | 746 | 326,378 |
| 96 Winnebago..... | 78 | 230,466 | 16,000 | 37,525 | 96,466 | 80,166 | 82 | 13 | 3,235 | 142 | 67,868 |
| 97 Winneshiek..... | 174 | 601,851 | 62,418 | 141,845 | 148,223 | 259,370 | 180 | 23 | 12,016 | 287 | 115,556 |
| 98 Woodbury..... | 398 | 5,950,223 | 535,968 | 1,158,774 | 1,508,541 | 2,746,940 | 449 | 329 | 297,997 | 3,133 | 1,514,180 |
| 99 Worth..... | 72 | 155,508 | 16,015 | 40,775 | 55,135 | 43,581 | 71 | 8 | 1,005 | 55 | 23,276 |
| 100 Wright..... | 104 | 281,030 | 18,715 | 68,120 | 85,936 | 108,259 | 115 | 14 | 6,638 | 267 | 128,095 |

TABLE 7.—MANUFACTURES BY

| | | \$14,819 | \$102,733,103 | \$11,701,830 | \$18,554,185 | \$26,150,011 | \$46,327,577 | 16,619 | 5,664 | \$4,486,117 | 58,558 | \$23,931,680 |
|---|--------|---------------|---------------|--------------|--------------|--------------|--------------|--------|-------------|-------------|--------------|--------------|
| 1 All industries..... | 14,819 | \$102,733,103 | \$11,701,830 | \$18,554,185 | \$26,150,011 | \$46,327,577 | 16,619 | 5,664 | \$4,486,117 | 58,558 | \$23,931,680 | |
| 2 Agricultural implements..... | 24 | 1,878,090 | 71,940 | 214,367 | 195,067 | 1,396,716 | 16 | 154 | 123,472 | 644 | 243,489 | |
| 3 Awnings, tents, and sails..... | 22 | 59,715 | 11,600 | 6,550 | 7,735 | 33,930 | 23 | 5 | 6,169 | 45 | 12,519 | |
| 4 Axle grease..... | 3 | 66,389 | 3,100 | 10,800 | 6,206 | 46,283 | 2 | 17 | 15,534 | 20 | 12,476 | |
| 5 Baking and yeast powders..... | 4 | 10,500 | 100 | 500 | 1,500 | 8,400 | 1 | 2 | 4,038 | 11 | 3,547 | |
| 6 Bicycle and tricycle repairing..... | 180 | 125,070 | 14,850 | 15,425 | 41,470 | 53,825 | 149 | 8 | 1,070 | 107 | 42,745 | |
| 7 Blacksmithing and wheelwrighting..... | 2,408 | 2,774,287 | 495,118 | 688,833 | 670,094 | 920,102 | 2,745 | 6 | 2,230 | 1,177 | 503,236 | |
| 8 Bookbinding and blank book making..... | 16 | 39,700 | | 20,295 | 20,295 | 19,405 | 19 | 17 | 14,380 | 50 | 15,909 | |
| 9 Boots and shoes, custom work and repairing..... | 475 | 195,836 | 31,745 | 60,664 | 63,643 | 59,834 | 492 | | | 144 | 61,727 | |
| 10 Boots and shoes, factory product..... | 7 | 506,757 | 12,100 | 57,840 | 86,471 | 350,346 | 7 | 40 | 35,832 | 566 | 191,783 | |
| 11 Bottling..... | 10 | 22,097 | 200 | 350 | 10,960 | 10,587 | 13 | 3 | 2,596 | 32 | 9,589 | |
| 12 Boxes, cigar..... | 9 | 56,953 | 1,650 | 4,000 | 9,167 | 42,136 | 7 | 4 | 4,180 | 76 | 20,485 | |
| 13 Boxes, fancy and paper..... | 7 | 31,644 | | | 16,687 | 14,977 | 8 | | | 94 | 19,822 | |
| 14 Boxes, wooden packing..... | 16 | 878,550 | 35,737 | 48,927 | 71,924 | 221,962 | 15 | 15 | 14,240 | 363 | 116,167 | |
| 15 Brass castings and brass finishing..... | 3 | 367,310 | 20,000 | 30,000 | 99,610 | 217,700 | 4 | 18 | 12,010 | 204 | 66,197 | |
| 16 Bread and other bakery products..... | 194 | 1,301,902 | 142,914 | 227,300 | 549,936 | 381,752 | 217 | 171 | 112,344 | 846 | 331,324 | |
| 17 Brick and tile..... | 339 | 3,076,355 | 574,097 | 1,086,217 | 727,441 | 738,600 | 441 | 94 | 65,068 | 1,986 | 768,860 | |
| 18 Bridges..... | 13 | 127,520 | 25,900 | 13,400 | 26,120 | 68,000 | 17 | 2 | 2,200 | 125 | 65,220 | |
| 19 Brooms and brushes..... | 71 | 161,577 | 17,816 | 34,405 | 19,140 | 90,556 | 33 | 12 | 14,339 | 240 | 76,323 | |
| 20 Buttons..... | 53 | 324,315 | 15,685 | 24,931 | 111,727 | 171,812 | 61 | 42 | 26,306 | 1,402 | 458,086 | |
| 21 Carpentering..... | 740 | 1,172,124 | 130,608 | 144,597 | 224,879 | 672,040 | 925 | 89 | 16,967 | 2,092 | 1,423,132 | |
| 22 Carpets, rag..... | 75 | 50,355 | 11,805 | 13,975 | 17,567 | 7,508 | 33 | 3 | 2,550 | 77 | 22,651 | |
| 23 Carriage and wagon materials..... | 14 | 144,551 | 16,900 | 41,800 | 23,175 | 62,870 | 14 | 23 | 7,995 | 127 | 45,838 | |
| 24 Carriages and wagons..... | 211 | 4,087,400 | 338,147 | 451,681 | 504,239 | 2,798,853 | 270 | 140 | 112,704 | 1,692 | 713,901 | |
| 25 Cars and general shop construction and repairs by steam railroad companies..... | 58 | 3,277,617 | 282,825 | 1,365,929 | 816,126 | 362,737 | | 278 | 249,948 | 5,497 | 2,948,947 | |
| 26 Cars and general shop construction and repairs by street railroad companies..... | 3 | 62,825 | 11,300 | 20,500 | 15,300 | 9,725 | | 6 | 8,400 | 85 | 51,207 | |
| 27 Cheese, butter, and condensed milk, factory product..... | 907 | 3,459,017 | 145,198 | 1,005,429 | 1,499,183 | 719,207 | 565 | 413 | 81,425 | 1,133 | 588,653 | |
| 28 China decorating..... | 3 | 1,425 | 25 | 200 | 175 | 1,025 | 3 | | | | | |
| 29 Clothing, men's, custom work and repairing..... | 500 | 727,034 | 69,746 | 89,160 | 76,263 | 491,865 | 531 | 33 | 25,464 | 1,303 | 568,041 | |
| 30 Clothing, men's, factory product..... | 18 | 660,514 | 10,000 | 30,000 | 74,545 | 545,969 | 8 | 138 | 101,818 | 1,340 | 303,286 | |
| 31 Clothing, women's, dressmaking..... | 291 | 120,200 | 16,915 | 34,770 | 25,724 | 41,791 | 337 | 3 | 2,145 | 775 | 127,451 | |
| 32 Clothing, women's, factory product..... | 7 | 23,899 | | | 4,800 | 19,599 | 11 | 10 | 3,520 | 65 | 9,706 | |
| 33 Coffee and spice, roasting and grinding..... | 12 | 403,313 | 9,100 | 30,610 | 46,497 | 317,106 | 15 | 64 | 59,474 | 80 | 31,270 | |
| 34 Collins, burial cases, and undertakers' goods..... | 5 | 814,286 | 19,700 | 51,070 | 21,676 | 221,940 | 3 | 27 | 27,238 | 175 | 78,063 | |
| 35 Confectionery..... | 64 | 577,197 | 84,590 | 65,535 | 186,762 | 290,310 | 70 | 111 | 91,612 | 559 | 145,420 | |
| 36 Coopers..... | 71 | 326,434 | 31,080 | 59,745 | 60,186 | 175,423 | 30 | 12 | 8,457 | 440 | 165,904 | |
| 37 Druggists' preparations, not including prescriptions..... | 6 | 44,710 | 2,000 | 8,200 | 4,110 | 30,400 | 5 | 7 | 6,060 | 10 | 3,556 | |
| 38 Dyeing and cleaning..... | 31 | 50,080 | 10,250 | 19,500 | 17,175 | 9,155 | 39 | 12 | 6,216 | 64 | 24,740 | |
| 39 Electrical construction and repairs..... | 12 | 40,485 | 250 | 800 | 5,965 | 33,470 | 11 | 9 | 6,520 | 41 | 19,575 | |
| 40 Fancy articles, not elsewhere specified..... | 3 | 1,940 | | | 40 | 1,900 | 3 | | | 41 | 7,700 | |
| 41 Flavoring extracts..... | 4 | 6,050 | | | 750 | 5,300 | 4 | 13 | 6,980 | 7 | 1,610 | |

BY COUNTIES: 1900—Continued.

| AVERAGE NUMBER OF WAGE-EARNERS AND TOTAL WAGES—continued. | | | | | | MISCELLANEOUS EXPENSES. | | | | | COST OF MATERIALS USED. | | | Value of products, including custom work and repairing. | |
|---|-----------|---------------------------|---------|---------------------------|--------|-------------------------|----------------|--|---------------------------------|----------------|-------------------------|---|----------------------------------|---|-----|
| Men, 16 years and over. | | Women, 16 years and over. | | Children, under 16 years. | | Total. | Rent of works. | Taxes, not including internal revenue. | Rent of offices, interest, etc. | Contract work. | Total. | Principal materials, including mill supplies and freight. | Fuel and rent of power and heat. | | |
| Average number. | Wages. | Average number. | Wages. | Average number. | Wages. | | | | | | | | | | |
| 55 | \$26,719 | 14 | \$2,718 | 8 | \$538 | \$8,823 | \$3,040 | \$1,177 | \$4,606 | ----- | \$184,000 | \$176,392 | \$7,608 | \$300,711 | 77 |
| 3,855 | 1,841,414 | 819 | 199,101 | 106 | 17,530 | 901,105 | 134,902 | 43,650 | 615,412 | \$107,111 | 5,173,612 | 4,996,193 | 177,419 | 10,856,986 | 78 |
| 1,124 | 617,776 | 130 | 30,125 | 23 | 4,263 | 178,344 | 30,216 | 9,674 | 133,910 | 4,344 | 1,491,763 | 1,444,871 | 46,892 | 3,029,523 | 79 |
| 816 | 144,163 | 71 | 21,936 | 2 | 256 | 43,123 | 6,170 | 2,025 | 21,898 | 13,083 | 587,303 | 527,953 | 9,355 | 1,192,863 | 80 |
| 87 | 16,391 | 6 | 1,365 | 5 | 680 | 5,444 | 2,482 | 710 | 2,247 | 5 | 80,682 | 77,384 | 3,298 | 169,495 | 81 |
| 75 | 33,562 | 11 | 2,870 | 2 | 208 | 19,667 | 3,475 | 1,412 | 8,170 | 610 | 341,303 | 332,061 | 9,242 | 509,404 | 82 |
| 3,892 | 1,632,915 | 854 | 212,665 | 164 | 23,013 | 861,257 | 77,317 | 45,405 | 655,182 | 83,353 | 6,921,917 | 6,722,617 | 199,300 | 11,720,441 | 83 |
| 63 | 27,730 | 2 | 408 | 5 | 460 | 5,610 | 1,671 | 715 | 8,224 | ----- | 179,436 | 171,271 | 8,165 | 289,954 | 84 |
| 143 | 61,962 | 15 | 3,419 | 11 | 1,960 | 34,054 | 4,959 | 2,766 | 26,323 | ----- | 561,776 | 487,806 | 13,970 | 778,244 | 85 |
| 136 | 66,348 | 26 | 5,160 | 13 | 1,460 | 19,329 | 6,022 | 1,807 | 10,477 | 1,023 | 461,652 | 389,124 | 12,528 | 666,552 | 86 |
| 249 | 111,106 | 40 | 6,898 | 31 | 4,333 | 29,141 | 7,295 | 2,413 | 18,639 | 789 | 329,798 | 309,074 | 20,724 | 662,929 | 87 |
| 103 | 17,714 | 16 | 811 | 9 | 1,125 | 10,546 | 3,708 | 1,067 | 5,949 | 5,824 | 227,212 | 220,454 | 6,758 | 376,193 | 88 |
| 393 | 132,084 | 59 | 9,045 | 12 | 1,073 | 81,454 | 15,043 | 5,864 | 13,787 | 1,550 | 460,511 | 458,164 | 11,347 | 879,248 | 89 |
| 228 | 78,291 | 109 | 21,514 | 12 | 1,073 | 23,911 | 3,263 | 2,939 | 20,193 | 1,906 | 424,728 | 415,800 | 8,928 | 717,314 | 90 |
| 1,751 | 738,632 | 231 | 60,405 | 151 | 20,542 | 203,929 | 28,955 | 13,746 | 161,406 | 1,822 | 7,169,468 | 7,110,906 | 58,562 | 9,231,773 | 91 |
| 86 | 32,350 | 9 | 1,712 | 11 | 1,170 | 11,818 | 2,846 | 1,909 | 4,568 | 2,600 | 240,496 | 235,654 | 4,842 | 384,583 | 92 |
| 258 | 100,777 | 24 | 4,258 | 6 | 913 | 35,782 | 6,072 | 2,561 | 10,146 | 17,403 | 388,528 | 356,673 | 11,955 | 660,501 | 93 |
| 93 | 37,829 | 20 | 3,835 | 8 | 835 | 10,373 | 4,488 | 1,223 | 4,212 | 450 | 179,421 | 172,571 | 6,850 | 310,707 | 94 |
| 637 | 293,903 | 98 | 25,890 | 11 | 1,585 | 100,682 | 17,839 | 6,453 | 48,468 | 27,354 | 1,041,331 | 978,299 | 62,752 | 1,813,400 | 95 |
| 118 | 52,077 | 20 | 5,063 | 4 | 728 | 14,082 | 3,998 | 1,339 | 8,595 | 150 | 418,685 | 406,153 | 9,532 | 539,652 | 96 |
| 251 | 108,102 | 34 | 7,274 | 2 | 180 | 34,247 | 8,273 | 3,271 | 21,654 | 1,044 | 779,112 | 765,666 | 13,546 | 1,177,067 | 97 |
| 2,679 | 1,407,356 | 443 | 97,137 | 61 | 9,587 | 670,166 | 75,067 | 26,695 | 559,989 | 15,415 | 10,832,963 | 10,694,461 | 138,542 | 15,891,189 | 98 |
| 48 | 21,957 | 6 | 1,139 | 1 | 180 | 6,823 | 1,742 | 1,187 | 2,314 | 1,055 | 262,704 | 256,041 | 6,663 | 353,300 | 99 |
| 246 | 124,760 | 13 | 3,133 | 8 | 802 | 13,289 | 5,004 | 2,179 | 6,106 | ----- | 370,206 | 356,441 | 13,765 | 621,568 | 100 |

SPECIFIED INDUSTRIES: 1900.

| | | | | | | | | | | | | | | | |
|--------|--------------|-------|-------------|-------|-----------|-------------|-------------|-----------|-------------|-----------|---------------|--------------|-------------|---------------|----|
| 48,417 | \$21,893,983 | 8,248 | \$1,766,858 | 1,888 | \$270,839 | \$7,938,767 | \$1,166,879 | \$547,635 | \$5,592,216 | \$632,037 | \$101,170,257 | \$98,911,434 | \$2,253,923 | \$164,617,877 | 1 |
| 641 | 242,538 | 1 | 421 | 2 | 500 | 96,540 | 1,807 | 7,085 | 87,545 | 103 | 669,989 | 650,012 | 19,977 | 1,504,667 | 2 |
| 22 | 7,242 | 23 | 5,277 | ----- | ----- | 8,097 | 2,736 | 408 | 4,953 | ----- | 48,093 | 47,604 | 489 | 101,303 | 3 |
| 20 | 12,475 | ----- | ----- | ----- | ----- | 21,932 | 36 | 209 | 21,687 | ----- | 47,567 | 47,567 | 351 | 132,101 | 4 |
| 7 | 2,440 | 4 | 1,107 | ----- | ----- | 4,334 | 610 | 33 | 3,741 | ----- | 13,133 | 13,093 | 85 | 23,395 | 5 |
| 103 | 42,192 | ----- | ----- | 4 | 553 | 20,496 | 12,941 | 688 | 6,513 | 854 | 86,014 | 83,201 | 2,813 | 218,554 | 6 |
| 1,162 | 501,317 | ----- | ----- | 15 | 1,919 | 124,716 | 60,475 | 18,021 | 44,961 | 1,259 | 1,004,390 | 904,547 | 99,843 | 3,361,298 | 7 |
| 21 | 9,769 | 25 | 5,529 | 4 | 611 | 8,143 | 2,510 | 256 | 1,841 | 3,536 | 27,649 | 26,980 | 669 | 83,391 | 8 |
| 144 | 61,727 | ----- | ----- | ----- | ----- | 29,413 | 24,049 | 1,233 | 3,946 | 170 | 150,285 | 145,530 | 4,755 | 432,336 | 9 |
| 272 | 115,659 | 227 | 65,557 | 67 | 10,567 | 13,718 | 1,732 | 2,174 | 14,812 | ----- | 507,492 | 502,329 | 4,663 | 786,141 | 10 |
| 32 | 9,589 | ----- | ----- | ----- | ----- | 8,110 | 2,195 | 800 | 5,615 | ----- | 60,530 | 59,793 | 737 | 114,666 | 11 |
| 24 | 9,208 | 46 | 10,347 | 6 | 930 | 3,721 | 598 | 280 | 2,842 | ----- | 60,125 | 49,373 | 752 | 90,544 | 12 |
| 15 | 7,150 | 76 | 12,272 | 3 | 400 | 3,063 | 2,340 | 211 | 517 | ----- | 26,503 | 25,437 | 1,066 | 59,990 | 13 |
| 803 | 106,967 | 20 | 2,200 | 40 | 7,000 | 27,219 | 915 | 1,976 | 20,548 | 3,780 | 542,745 | 511,233 | 1,507 | 852,637 | 14 |
| 177 | 62,147 | 27 | 4,050 | 27 | 2,418 | 23,418 | 138 | 906 | 22,374 | ----- | 135,337 | 132,737 | 2,600 | 268,099 | 15 |
| 564 | 275,061 | 257 | 49,969 | 25 | 6,294 | 119,837 | 40,052 | 8,857 | 69,567 | 1,361 | 1,427,765 | 1,386,048 | 41,717 | 2,673,788 | 16 |
| 1,942 | 761,863 | 1 | 360 | 43 | 7,132 | 115,897 | 11,509 | 14,462 | 83,732 | 6,194 | 400,313 | 31,413 | 373,900 | 1,976,323 | 17 |
| 125 | 65,260 | ----- | ----- | ----- | ----- | 28,067 | 1,155 | 462 | 24,210 | 2,240 | 179,417 | 178,867 | 545 | 306,844 | 18 |
| 171 | 62,951 | 43 | 9,201 | 26 | 4,171 | 8,838 | 3,542 | 811 | 4,530 | ----- | 151,621 | 149,067 | 2,554 | 348,443 | 19 |
| 87 | 361,062 | 441 | 86,550 | 74 | 10,474 | 37,252 | 4,624 | 1,255 | 26,753 | 4,620 | 196,842 | 183,310 | 13,032 | 866,533 | 20 |
| 2,937 | 1,422,031 | 2 | 635 | 3 | 466 | 509,540 | 24,075 | 6,367 | 34,265 | 444,833 | 3,627,095 | 3,615,643 | 11,447 | 6,872,393 | 21 |
| 47 | 17,153 | 22 | 4,685 | 8 | 913 | 4,419 | 2,781 | 312 | 1,324 | 2 | 22,353 | 20,683 | 1,670 | 101,246 | 22 |
| 120 | 48,632 | 7 | 1,706 | ----- | ----- | 8,275 | 1,234 | 1,126 | 5,855 | 60 | 153,715 | 151,434 | 2,281 | 259,523 | 23 |
| 1,655 | 704,689 | 32 | 7,452 | 5 | 1,700 | 213,734 | 19,373 | 24,471 | 193,475 | 1,470 | 1,863,983 | 1,826,334 | 37,649 | 3,931,067 | 24 |
| 5,483 | 2,946,013 | 4 | 1,284 | 5 | 1,050 | 124,463 | ----- | 36,894 | 87,559 | ----- | 2,396,269 | 2,795,055 | 101,214 | 6,221,373 | 25 |
| 85 | 51,207 | ----- | ----- | ----- | ----- | 880 | ----- | 330 | 500 | ----- | 36,699 | 32,399 | 4,300 | 97,186 | 26 |
| 1,090 | 532,144 | 22 | 4,951 | 12 | 1,553 | 153,990 | 12,039 | 17,039 | 121,816 | 3,046 | 13,501,556 | 13,255,944 | 245,612 | 15,846,077 | 27 |
| 1,030 | 497,330 | 261 | 68,939 | 12 | 1,672 | 122,672 | 103 | 2 | 34,150 | 7,414 | 816,380 | 802,714 | 13,666 | 2,111,151 | 28 |
| 147 | 66,182 | 1,178 | 235,304 | 15 | 1,800 | 95,446 | 12,854 | 5,361 | 77,231 | ----- | 910,106 | 903,944 | 6,162 | 1,534,697 | 29 |
| 21 | 9,700 | 753 | 117,655 | 1 | 96 | 25,330 | 20,413 | 952 | 4,003 | 12 | 112,987 | 108,963 | 4,019 | 459,157 | 30 |
| 4 | 2,466 | 61 | 7,240 | ----- | ----- | 1,639 | 933 | 3 | 550 | 103 | 25,284 | 24,798 | 486 | 46,983 | 31 |
| 48 | 23,405 | 31 | 7,709 | 1 | 156 | 16,966 | 4,400 | 2,521 | 10,366 | ----- | 793,613 | 789,734 | 5,829 | 970,962 | 32 |
| 149 | 66,351 | 26 | 6,212 | ----- | ----- | 13,785 | ----- | 2,158 | 11,627 | ----- | 226,400 | 225,235 | 1,115 | 399,402 | 33 |
| 249 | 95,637 | 307 | 49,273 | 3 | 510 | 56,311 | 19,670 | 2,807 | 33,834 | ----- | 716,901 | 705,713 | 11,188 | 1,264,530 | 34 |
| 421 | 162,304 | 1 | 250 | 18 | 2,850 | 16,077 | 3,231 | 3,376 | 10,470 | ----- | 457,477 | 452,196 | 5,281 | 719,036 | 35 |
| 7 | 2,330 | 8 | 676 | ----- | ----- | 8,272 | 595 | 185 | 7,492 | ----- | 17,851 | 17,696 | 155 | 45,344 | 36 |
| 43 | 19,369 | 19 | 5,035 | 2 | 336 | 14,219 | 5,181 | 399 | 8,639 | ----- | 12,716 | 9,205 | 3,511 | 96,523 | 37 |
| 41 | 19,575 | ----- | ----- | ----- | ----- | 4,415 | 2,662 | 227 | 1,326 | ----- | 80,243 | 79,600 | 643 | 134,335 | 38 |
| 7 | 5,000 | 34 | 2,700 | ----- | ----- | 831 | 341 | 125 | 363 | ----- | 3,895 | 3,870 | 25 | 10,850 | 39 |
| 1 | 200 | 6 | 1,320 | ----- | ----- | 2,199 | 1,260 | 76 | 863 | ----- | 15,731 | 15,656 | 75 | 30,340 | 40 |

TABLE 7.—MANUFACTURES BY

| MANUFACTURING AND MECHANICAL INDUSTRIES. | Number of establishments. | CAPITAL. | | | | | Proprietors and firm members. | SALARIED OFFICIALS, CLERKS, ETC. | | AVERAGE NUMBER OF WAGE-EARNERS AND TOTAL WAGES. | |
|--|---------------------------|-------------|-----------|-------------|-----------------------------------|--------------------|-------------------------------|----------------------------------|-----------|---|-----------|
| | | Total. | Land. | Buildings. | Machinery, tools, and implements. | Cash and sundries. | | Number. | Salaries. | Total. | |
| | | | | | | | | | | Average number. | Wages. |
| 42 Flouring and grist mill products..... | 702 | \$6,421,078 | \$762,946 | \$1,481,670 | \$2,379,941 | \$1,796,521 | 866 | 210 | \$160,476 | 1,285 | \$526,479 |
| 43 Food preparations..... | 16 | 2,501,521 | 164,100 | 702,500 | 840,071 | 794,850 | 21 | 54 | 49,510 | 609 | 209,031 |
| 44 Foundry and machine shop products..... | 190 | 8,732,774 | 310,487 | 569,516 | 1,027,782 | 1,824,989 | 216 | 221 | 204,969 | 2,372 | 1,088,812 |
| 45 Fruits and vegetables, canning and preserving. | 26 | 1,027,821 | 87,900 | 190,900 | 311,869 | 486,652 | 15 | 46 | 27,305 | 699 | 184,710 |
| 46 Fur goods..... | 14 | 52,955 | 2,500 | 5,000 | 3,955 | 41,500 | 17 | 2 | 930 | 65 | 23,225 |
| 47 Furnishing goods, men's..... | 3 | 25,162 | | | 2,741 | 22,421 | 1 | 10 | 7,020 | 33 | 7,119 |
| 48 Furniture, cabinetmaking, repairing, and upholstering. | 103 | 170,742 | 20,575 | 34,700 | 22,433 | 93,034 | 124 | 8 | 3,870 | 98 | 49,232 |
| 49 Furniture, factory product..... | 26 | 1,021,658 | 86,010 | 161,180 | 176,002 | 593,466 | 11 | 105 | 84,676 | 850 | 292,080 |
| 50 Furs, dressed..... | 6 | 15,250 | 325 | 2,025 | 8,100 | 3,900 | 8 | | | 14 | 7,640 |
| 51 Gas, illuminating and heating..... | 26 | 4,129,984 | 241,338 | 258,452 | 3,325,820 | 304,874 | | 90 | 70,120 | 226 | 118,307 |
| 52 Gas machines and meters..... | 6 | 29,700 | 100 | 3,200 | 3,500 | 22,900 | 8 | 6 | 4,750 | 11 | 5,100 |
| 53 Gloves and mittens..... | 9 | 277,008 | 22,000 | 35,000 | 22,500 | 197,508 | 17 | 43 | 81,198 | 174 | 56,958 |
| 54 Grease and tallow..... | 8 | 22,392 | 4,070 | 5,650 | 6,250 | 6,422 | 10 | 5 | 1,530 | 10 | 3,937 |
| 55 Hairy work..... | 7 | 9,045 | 1,000 | 2,500 | 345 | 5,200 | 9 | | | 14 | 3,826 |
| 56 Hardware..... | 5 | 249,139 | 18,149 | 39,470 | 73,264 | 118,256 | 4 | 27 | 24,561 | 244 | 61,539 |
| 57 Ice, artificial..... | 3 | 165,900 | 23,000 | 29,800 | 88,000 | 24,500 | 3 | 10 | 8,055 | 33 | 15,067 |
| 58 Ironwork, architectural and ornamental. | 12 | 372,305 | 26,200 | 37,108 | 83,699 | 225,298 | 10 | 25 | 22,166 | 189 | 79,613 |
| 59 Jewelry..... | 3 | 12,275 | 1,100 | 2,050 | 3,250 | 5,875 | 7 | 2 | 1,150 | 16 | 3,865 |
| 60 Kindling wood..... | 3 | 22,000 | 6,314 | 3,874 | 5,562 | 6,250 | 2 | 4 | 3,000 | 30 | 7,433 |
| 61 Lime and cement..... | 28 | 663,830 | 89,100 | 159,325 | 261,785 | 153,620 | 27 | 33 | 26,658 | 302 | 145,382 |
| 62 Liquors, malt..... | 21 | 2,420,515 | 215,005 | 973,110 | 417,677 | 814,723 | 18 | 55 | 84,136 | 321 | 189,916 |
| 63 Liquors, vinous..... | 6 | 2,100 | 160 | 910 | 715 | 315 | 6 | | | 2 | 578 |
| 64 Lock and gun smithing..... | 41 | 31,173 | 4,275 | 3,315 | 16,875 | 7,208 | 44 | | | 16 | 7,499 |
| 65 Looking-glass and picture frames..... | 35 | 34,150 | 2,200 | 3,300 | 5,450 | 23,200 | 42 | 6 | 2,715 | 40 | 16,167 |
| 66 Lumber and timber products..... | 264 | 8,792,219 | 1,978,335 | 273,966 | 813,282 | 5,696,636 | 327 | 145 | 173,768 | 2,798 | 1,046,181 |
| 67 Lumber, planing mill products, including sash, doors, and blinds. | 65 | 3,576,305 | 232,177 | 395,621 | 494,335 | 2,454,172 | 66 | 187 | 180,435 | 2,372 | 938,924 |
| 68 Marble and stone work..... | 39 | 370,479 | 60,425 | 57,900 | 103,977 | 148,177 | 47 | 11 | 7,700 | 352 | 161,363 |
| 69 Masonry, brick and stone..... | 170 | 624,713 | 32,102 | 23,287 | 130,689 | 438,635 | 216 | 29 | 24,682 | 1,124 | 570,560 |
| 70 Mattresses and spring beds..... | 7 | 54,531 | 5,700 | 3,000 | 8,622 | 37,309 | 5 | 17 | 10,972 | 49 | 16,733 |
| 71 Millinery, custom work..... | 926 | 1,235,043 | 145,840 | 233,325 | 55,535 | 800,348 | 1,127 | 90 | 26,617 | 1,253 | 282,940 |
| 72 Mineral and soda waters..... | 73 | 398,447 | 63,155 | 57,645 | 132,470 | 145,177 | 33 | 34 | 25,006 | 152 | 58,757 |
| 73 Models and patterns..... | 4 | 11,720 | 1,660 | 3,070 | 5,040 | 1,950 | 3 | 3 | 2,700 | 11 | 3,786 |
| 74 Monuments and tombstones..... | 139 | 637,687 | 53,475 | 67,275 | 35,942 | 480,895 | 183 | 71 | 39,480 | 323 | 177,585 |
| 75 Musical instruments and materials, not specified. | 6 | 15,125 | | | 5,950 | 9,176 | 8 | 3 | 150 | 9 | 4,740 |
| 76 Oil, linseed..... | 4 | 647,029 | 85,000 | 57,000 | 192,000 | 313,029 | | 24 | 42,696 | 34 | 44,973 |
| 77 Painting, house, sign, etc..... | 338 | 281,402 | 32,495 | 29,295 | 54,477 | 165,135 | 418 | 33 | 13,055 | 766 | 331,670 |
| 78 Paints..... | 6 | 207,485 | 7,242 | 22,550 | 20,313 | 156,880 | 9 | 31 | 23,480 | 40 | 14,739 |
| 79 Paper and wood pulp..... | 4 | 182,045 | 20,000 | 10,000 | 124,040 | 27,645 | 2 | 11 | 11,770 | 180 | 63,589 |
| 80 Paper hanging..... | 28 | 76,196 | 6,760 | 5,960 | 4,625 | 58,921 | 28 | 17 | 7,641 | 121 | 65,177 |
| 81 Patent medicines and compounds..... | 41 | 512,019 | 20,416 | 5,400 | 30,739 | 455,354 | 45 | 296 | 396,531 | 102 | 65,784 |
| 82 Paving and paving materials..... | 38 | 146,082 | 20,235 | 5,472 | 34,385 | 85,490 | 51 | 9 | 4,400 | 330 | 114,410 |
| 83 Perfumery and cosmetics..... | 6 | 79,350 | 2,000 | 9,000 | 3,500 | 64,850 | 11 | 69 | 31,968 | 33 | 9,611 |
| 84 Photography..... | 406 | 490,359 | 63,735 | 115,100 | 207,247 | 104,777 | 441 | 10 | 3,641 | 194 | 72,555 |
| 85 Pickles, preserves, and sauces..... | 15 | 471,171 | 48,726 | 117,701 | 87,169 | 217,575 | 10 | 45 | 47,665 | 322 | 69,003 |
| 86 Plastering and stuccowork..... | 58 | 24,084 | 1,025 | 1,600 | 4,913 | 16,541 | 73 | 3 | 1,810 | 151 | 64,570 |
| 87 Plumbing, and gas and steam fitting..... | 196 | 575,937 | 29,300 | 34,750 | 86,627 | 421,260 | 259 | 46 | 24,992 | 729 | 374,470 |
| 88 Pottery, terra cotta, and fire-clay products. | 17 | 361,253 | 85,550 | 111,567 | 71,100 | 93,041 | 17 | 13 | 13,359 | 234 | 93,299 |
| 89 Printing and publishing, book and job. | 115 | 976,341 | 29,300 | 100,214 | 513,312 | 333,015 | 121 | 141 | 103,761 | 855 | 345,665 |
| 90 Printing and publishing, newspapers and periodicals. | 910 | 4,703,049 | 239,560 | 403,976 | 2,451,255 | 1,606,268 | 1,033 | 523 | 398,965 | 3,393 | 1,311,179 |
| 91 Roofing and roofing materials..... | 29 | 92,071 | 12,825 | 10,250 | 12,735 | 56,261 | 34 | 6 | 3,010 | 97 | 31,834 |
| 92 Rubber and elastic goods..... | 3 | 2,486 | | | 684 | 1,752 | 2 | 1 | 520 | 3 | 1,070 |
| 93 Saddlery and harness..... | 982 | 2,977,146 | 294,838 | 496,393 | 216,350 | 1,969,560 | 1,097 | 115 | 56,954 | 1,230 | 403,651 |
| 94 Sausage..... | 4 | 13,300 | 5,000 | 6,600 | 2,600 | 4,100 | 6 | | | 13 | 6,500 |
| 95 Scales and balances..... | 7 | 65,492 | 2,100 | 3,400 | 15,500 | 44,492 | 4 | 1 | 400 | 37 | 18,704 |
| 96 Sewing machine repairing..... | 6 | 1,042 | | | 677 | 365 | 6 | | | | |
| 97 Ship and boat building, wooden..... | 10 | 28,996 | 8,400 | 5,625 | 6,200 | 3,771 | 9 | 7 | 4,700 | 38 | 13,430 |
| 98 Shirts..... | 5 | 10,300 | | | 3,750 | 6,550 | 7 | | | 33 | 11,232 |
| 99 Show cases..... | 3 | 4,960 | | | 1,760 | 3,200 | 4 | 1 | 200 | 9 | 5,410 |
| 100 Slaughtering and meat packing, wholesale. | 20 | 6,264,578 | 151,750 | 1,193,153 | 499,375 | 4,415,300 | 13 | 190 | 196,056 | 2,374 | 1,201,651 |
| 101 Slaughtering, wholesale, not including meat packing. | 7 | 86,775 | 26,300 | 33,900 | 15,700 | 10,875 | 6 | 3 | 1,320 | 13 | 6,486 |
| 102 Soap and candles..... | 12 | 317,410 | 25,900 | 41,650 | 61,167 | 188,693 | 14 | 33 | 30,072 | 105 | 33,388 |
| 103 Starch..... | 4 | 700,064 | 30,000 | 225,000 | 205,234 | 239,830 | | 35 | 37,342 | 327 | 114,881 |
| 104 Steam fittings and heating apparatus..... | 4 | 34,317 | 4,500 | 9,000 | 23,000 | 47,817 | 5 | 10 | 8,840 | 53 | 24,107 |
| 105 Sugar and molasses, refining..... | 33 | 107,582 | 12,050 | 29,130 | 23,230 | 43,172 | 40 | 17 | 13,460 | 63 | 20,000 |
| 106 Smithing, coppersmithing, and sheet-iron working. | 624 | 1,489,276 | 191,977 | 312,378 | 308,884 | 676,037 | 783 | 46 | 32,580 | 942 | 423,170 |
| 107 Tobacco, cigars and cigarettes..... | 403 | 1,264,097 | 52,160 | 67,437 | 65,026 | 1,073,474 | 458 | 126 | 117,006 | 1,356 | 700,777 |
| 108 Tools, not elsewhere specified..... | 4 | 154,365 | 5,000 | 17,600 | 24,300 | 107,465 | 4 | 15 | 11,191 | 65 | 26,637 |
| 109 Trunks and valises..... | 7 | 30,340 | 6,000 | 1,650 | 3,130 | 19,500 | 7 | 2 | 1,100 | 17 | 6,192 |
| 110 Upholstering materials..... | 7 | 61,565 | 1,900 | 9,328 | 22,269 | 25,017 | 2 | 6 | 4,490 | 54 | 13,477 |
| 111 Vinegar and cider..... | 8 | 126,957 | 14,905 | 37,670 | 40,788 | 33,594 | 4 | 25 | 23,539 | 29 | 10,680 |

SPECIFIED INDUSTRIES: 1900—Continued.

| AVERAGE NUMBER OF WAGE-EARNERS AND TOTAL WAGES—continued. | | | | | | MISCELLANEOUS EXPENSES. | | | | | COST OF MATERIALS USED. | | | Value of products, including custom work and repairing. | |
|---|-----------|---------------------------|----------|---------------------------|--------|-------------------------|----------------|--|---------------------------------|----------------|-------------------------|---|----------------------------------|---|-----|
| Men, 16 years and over. | | Women, 16 years and over. | | Children, under 16 years. | | Total. | Rent of works. | Taxes, not including internal revenue. | Rent of offices, interest, etc. | Contract work. | Total. | Principal materials, including mill supplies and freight. | Fuel and rent of power and heat. | | |
| Average number. | Wages. | Average number. | Wages. | Average number. | Wages. | | | | | | | | | | |
| 1,224 | \$512,119 | 49 | \$13,570 | 12 | \$790 | \$304,256 | \$18,387 | \$45,865 | \$230,892 | \$672 | \$11,272,217 | \$11,075,461 | \$196,756 | \$13,823,683 | 42 |
| 366 | 163,908 | 208 | 41,001 | 35 | 4,122 | 196,297 | 2,026 | 2,152 | 192,119 | | 2,388,003 | 2,355,730 | 32,273 | 3,004,031 | 43 |
| 2,296 | 1,077,040 | 14 | 2,130 | 62 | 9,142 | 200,918 | 22,534 | 19,184 | 148,782 | 10,418 | 2,189,660 | 2,094,681 | 94,979 | 4,460,914 | 44 |
| 821 | 114,630 | 266 | 54,575 | 112 | 15,505 | 63,185 | 225 | 3,852 | 57,503 | 1,600 | 767,231 | 755,874 | 11,857 | 1,959,958 | 45 |
| 9 | 6,496 | 56 | 16,729 | | | 10,435 | 5,279 | 415 | 4,741 | | 63,840 | 63,700 | 140 | 136,788 | 46 |
| 4 | 1,356 | 29 | 5,763 | | | 6,821 | 1,071 | 165 | 5,685 | | 53,329 | 53,133 | 196 | 78,700 | 47 |
| 93 | 47,998 | 4 | 1,078 | 1 | 166 | 14,013 | 9,214 | 1,145 | 3,654 | | 123,191 | 121,432 | 1,759 | 266,213 | 48 |
| 766 | 274,860 | 24 | 6,396 | 60 | 10,815 | 108,309 | 10,391 | 6,374 | 74,096 | 17,948 | 746,674 | 734,412 | 12,162 | 1,419,862 | 49 |
| 11 | 6,588 | 3 | 1,052 | | | 1,932 | 444 | 63 | 1,430 | | 6,615 | 6,615 | 1,484 | 24,593 | 50 |
| 225 | 118,161 | | | 1 | 156 | 269,017 | | 80,295 | 228,722 | | 203,961 | 190,731 | 13,230 | 807,787 | 51 |
| 11 | 5,100 | | | | | 1,602 | 557 | 90 | 955 | | 15,748 | 15,603 | 145 | 82,835 | 52 |
| 60 | 29,310 | 114 | 26,948 | 10 | 700 | 15,009 | 1,572 | 1,087 | 12,300 | 50 | 124,751 | 122,575 | 2,179 | 284,920 | 53 |
| 10 | 8,987 | | | | | 1,632 | 120 | 135 | 1,427 | | 77,725 | 76,204 | 1,521 | 92,423 | 54 |
| 2 | 936 | 12 | 2,890 | | | 1,700 | 1,202 | 68 | 1,400 | | 4,700 | 4,631 | 155 | 16,410 | 55 |
| 223 | 59,830 | 21 | 4,709 | | | 80,708 | 348 | 557 | 29,808 | | 108,915 | 108,915 | 4,596 | 311,737 | 56 |
| 33 | 15,067 | | | | | 9,014 | 606 | 875 | 7,443 | | 10,590 | 2,758 | 7,772 | 38,400 | 57 |
| 187 | 79,427 | | | 2 | 186 | 20,080 | 1,248 | 1,059 | 7,996 | 10,377 | 300,714 | 298,005 | 2,709 | 112,909 | 58 |
| 16 | 8,865 | | | | | 632 | 520 | 17 | 95 | | 8,654 | 8,368 | 286 | 32,900 | 59 |
| 30 | 7,833 | | | | | 2,302 | 81 | 54 | 2,227 | | 8,933 | 8,658 | 275 | 25,554 | 60 |
| 300 | 144,662 | | | 2 | 720 | 68,488 | 7,072 | 2,580 | 27,672 | 31,164 | 181,514 | 139,950 | 41,564 | 543,207 | 61 |
| 817 | 189,866 | | | 4 | 550 | 736,550 | 15,050 | 12,776 | 708,725 | | 335,164 | 331,304 | 38,860 | 1,713,911 | 62 |
| 2 | 578 | | | | | 322 | 123 | 47 | 150 | | 1,410 | 1,410 | | 4,110 | 63 |
| 14 | 7,256 | | | 2 | 248 | 5,418 | 4,117 | 265 | 1,036 | | 11,220 | 10,286 | 934 | 43,747 | 64 |
| 36 | 14,976 | 4 | 1,191 | | | 7,652 | 4,114 | 367 | 1,871 | 1,300 | 45,195 | 44,674 | 521 | 94,255 | 65 |
| 2,677 | 1,028,768 | 5 | 1,229 | 111 | 16,194 | 342,386 | 7,102 | 65,649 | 299,735 | | 6,324,034 | 6,323,984 | 50 | 8,077,058 | 66 |
| 2,826 | 972,611 | | | 46 | 11,313 | 255,979 | 11,521 | 23,027 | 221,431 | | 3,195,243 | 3,172,827 | 22,416 | 5,295,546 | 67 |
| 344 | 100,016 | | | 8 | 1,347 | 15,957 | 1,799 | 1,742 | 11,016 | 1,400 | 102,503 | 95,841 | 6,662 | 355,046 | 68 |
| 1,123 | 570,456 | | | 1 | 104 | 44,492 | 6,359 | 983 | 17,075 | 20,000 | 1,022,997 | 1,021,894 | 1,103 | 1,919,219 | 69 |
| 88 | 13,463 | | | | | 10,611 | 1,965 | 193 | 7,993 | | 43,465 | 39,793 | 1,670 | 143,660 | 70 |
| 5 | 4,170 | 11 | 3,270 | 9 | 828 | 170,220 | 116,735 | 9,760 | 42,930 | 795 | 1,390,783 | 1,375,797 | 14,986 | 2,624,182 | 71 |
| 144 | 57,638 | 3 | 419 | 5 | 700 | 42,007 | 5,350 | 2,601 | 33,951 | 96 | 146,803 | 142,881 | 3,922 | 428,913 | 72 |
| 7 | 2,756 | 3 | 780 | 1 | 250 | 948 | 336 | 114 | 493 | | 2,365 | 1,941 | 424 | 13,175 | 73 |
| 327 | 177,225 | 1 | 800 | | | 43,117 | 13,836 | 4,315 | 29,666 | 250 | 630,514 | 623,901 | 8,613 | 1,207,459 | 74 |
| 9 | 4,740 | | | | | 2,864 | 1,259 | 52 | 1,553 | | 82,552 | 82,396 | 156 | 70,148 | 75 |
| 84 | 44,973 | | | | | 61,932 | | 4,809 | 57,123 | | 1,456,798 | 1,441,403 | 15,395 | 1,612,793 | 76 |
| 762 | 330,118 | 2 | 1,292 | 2 | 260 | 38,286 | 22,285 | 1,471 | 14,490 | 100 | 337,395 | 335,825 | 1,570 | 1,010,669 | 77 |
| 84 | 13,510 | 6 | 1,229 | | | 19,333 | 20 | 783 | 19,030 | | 255,510 | 255,510 | 4,558 | 336,367 | 78 |
| 132 | 55,374 | 28 | 4,904 | 20 | 3,251 | 13,350 | 2,500 | 115 | 10,735 | | 106,615 | 89,073 | 17,637 | 243,776 | 79 |
| 121 | 65,177 | | | | | 19,374 | 5,705 | 593 | 8,931 | | 84,045 | 83,810 | 235 | 210,904 | 80 |
| 102 | 46,480 | 89 | 19,204 | 1 | 100 | 201,393 | 3,853 | 2,038 | 190,441 | 15 | 800,833 | 298,174 | 2,709 | 1,360,643 | 81 |
| 826 | 113,428 | 2 | 600 | 2 | 332 | 7,293 | 1,469 | 250 | 5,574 | | 157,740 | 156,747 | 993 | 358,485 | 82 |
| 10 | 4,111 | 23 | 4,820 | 1 | 680 | 20,216 | 1,544 | 406 | 18,266 | | 39,965 | 39,588 | 377 | 121,129 | 83 |
| 95 | 43,209 | 98 | 23,271 | 5 | 75 | 70,009 | 45,051 | 2,973 | 20,627 | 1,853 | 213,677 | 204,860 | 8,817 | 712,215 | 84 |
| 104 | 43,634 | 151 | 25,012 | 7 | 460 | 39,651 | 1,789 | 4,005 | 33,857 | | 414,637 | 409,310 | 5,323 | 762,435 | 85 |
| 151 | 64,570 | | | | | 7,344 | 1,557 | 62 | 965 | 4,760 | 77,717 | 77,601 | 116 | 200,414 | 86 |
| 724 | 373,620 | 2 | 516 | 3 | 334 | 67,186 | 31,483 | 4,133 | 30,923 | 642 | 925,992 | 919,276 | 6,716 | 1,780,035 | 87 |
| 233 | 93,024 | | | 1 | 275 | 24,562 | | 2,093 | 22,219 | 250 | 57,267 | 10,811 | 46,456 | 248,697 | 88 |
| 677 | 301,999 | 156 | 40,700 | 22 | 2,960 | 89,247 | 31,342 | 6,310 | 44,529 | 7,066 | 411,711 | 393,957 | 17,754 | 1,210,110 | 89 |
| 2,324 | 1,107,349 | 596 | 148,477 | 473 | 53,353 | 444,690 | 101,133 | 22,154 | 286,431 | 34,972 | 1,082,549 | 1,014,827 | 67,722 | 4,035,453 | 90 |
| 96 | 31,562 | 1 | 272 | | | 5,979 | 2,695 | 338 | 2,946 | | 84,088 | 83,367 | 721 | 165,474 | 91 |
| 2 | 800 | 1 | 270 | | | 587 | 285 | | 272 | | 2,905 | 2,878 | 27 | 5,371 | 92 |
| 1,210 | 490,826 | 9 | 1,919 | 11 | 1,106 | 163,252 | 72,838 | 21,559 | 60,765 | 6,037 | 1,705,432 | 1,681,581 | 23,851 | 3,273,972 | 93 |
| 13 | 6,500 | | | | | 1,000 | 660 | 255 | 85 | | 47,835 | 47,430 | 405 | 67,300 | 94 |
| 37 | 13,704 | | | | | 3,528 | 1,705 | 490 | 1,333 | | 22,401 | 21,139 | 1,262 | 53,214 | 95 |
| | | | | | | 637 | 272 | | 365 | | 1,260 | 1,190 | 70 | 3,780 | 96 |
| 38 | 13,430 | | | | | 1,180 | 315 | 223 | 637 | | 13,207 | 12,603 | 604 | 42,665 | 97 |
| 2 | 836 | 31 | 10,396 | | | 1,344 | 991 | 89 | 314 | | 6,509 | 6,219 | 290 | 32,338 | 98 |
| 9 | 5,410 | | | | | 1,300 | 1,230 | 70 | 70 | | 6,859 | 6,694 | 165 | 16,427 | 99 |
| 2,630 | 1,156,935 | 29 | 9,906 | 215 | 34,840 | 437,103 | 4,130 | 19,345 | 413,628 | | 21,195,066 | 21,054,250 | 140,816 | 25,296,513 | 100 |
| 13 | 6,486 | | | | | 4,833 | | 331 | 4,052 | | 361,578 | 360,523 | 1,050 | 393,526 | 101 |
| 76 | 34,047 | 22 | 3,651 | 7 | 690 | 34,722 | 3,965 | 1,427 | 29,330 | | 407,150 | 400,041 | 7,109 | 600,715 | 102 |
| 248 | 97,050 | 77 | 17,331 | 2 | 500 | 59,192 | 180 | 2,375 | 56,637 | | 623,314 | 586,630 | 37,134 | 393,831 | 103 |
| 53 | 24,107 | | | | | 5,331 | 540 | 266 | 4,576 | | 37,029 | 36,179 | 850 | 93,429 | 104 |
| 42 | 15,260 | 20 | 4,620 | 1 | 120 | 14,627 | 21 | 1,015 | 13,591 | | 130,675 | 127,315 | 3,330 | 215,333 | 105 |
| 393 | 416,271 | 41 | 5,568 | 8 | 1,331 | 99,450 | 42,721 | 9,068 | 47,061 | 600 | 1,058,971 | 1,039,638 | 19,333 | 2,208,239 | 106 |
| 1,143 | 536,622 | 559 | 144,534 | 154 | 19,621 | 412,318 | 52,343 | 8,647 | 351,173 | 150 | 948,991 | 940,300 | 8,691 | 2,576,334 | 107 |
| 50 | 22,347 | 14 | 4,200 | 1 | 150 | 3,394 | 125 | 872 | 2,337 | | 95,440 | 92,249 | 3,191 | 132,187 | 108 |
| 16 | 6,038 | | | 1 | 104 | 4,010 | 2,032 | 299 | 1,600 | | 16,300 | 15,304 | 496 | 42,006 | 109 |
| 54 | 13,477 | | | | | 1,179 | 50 | 124 | 1,005 | | 26,362 | 25,120 | 1,242 | 70,327 | 110 |
| 23 | 9,627 | 6 | 1,053 | | | 11,470 | 837 | 665 | 9,313 | | 62,302 | 63,685 | 4,117 | 130,453 | 111 |

TABLE 7.—MANUFACTURES BY

| MANUFACTURING AND MECHANICAL INDUSTRIES. | Number of establishments. | CAPITAL. | | | | | Proprietors and firm members. | SALARIED OFFICIALS, CLERKS, ETC. | | AVERAGE NUMBER OF WAGE-EARNERS AND TOTAL WAGES. | |
|--|---------------------------|------------|-----------|------------|-----------------------------------|--------------------|-------------------------------|----------------------------------|-----------|---|----------|
| | | Total. | Land. | Buildings. | Machinery, tools, and implements. | Cash and sundries. | | Number. | Salaries. | Total. | |
| | | | | | | | | | | Average number. | Wages. |
| 112 Washing machines and clothes wringers. | 8 | \$19,500 | \$1,000 | \$1,800 | \$5,200 | \$12,000 | 5 | 1 | \$520 | 80 | \$10,120 |
| 113 Watch, clock, and jewelry repairing. | 482 | 531,603 | 69,440 | 101,811 | 158,278 | 202,074 | 492 | 4 | 1,887 | 264 | 132,586 |
| 114 Windmills. | 8 | 161,104 | 16,800 | 12,689 | 13,843 | 117,772 | 7 | 4 | 5,200 | 72 | 43,111 |
| 115 Window shades. | 8 | 8,150 | 600 | 500 | 250 | 1,900 | 2 | | | 2 | 1,024 |
| 116 Wirework, including wire rope and cable. | 25 | 186,510 | 6,850 | 16,525 | 76,987 | 86,198 | 34 | 20 | 11,134 | 108 | 40,934 |
| 117 Wood, turned and carved. | 13 | 48,000 | 3,680 | 6,860 | 14,475 | 22,985 | 21 | 1 | 600 | 48 | 14,590 |
| 118 Woolen goods. | 12 | 494,074 | 24,990 | 67,850 | 143,350 | 257,884 | 11 | 26 | 16,611 | 256 | 64,596 |
| 119 All other industries ¹ . | 73 | 11,509,227 | 2,366,907 | 2,991,162 | 3,074,218 | 2,577,005 | 78 | 177 | 189,415 | 1,555 | 703,282 |

¹ Embraces artificial limbs, 1; baskets, and rattan and willow ware, 2; bells, 1; bicycles and tricycles, 1; brassware, 1; butter, reworking, 1; charcoal, 2; cleansing and polishing preparations, 2; cordage and twine, 1; cutlery and edge tools, 1; dentists' materials, 2; electrical apparatus and supplies, 2; electroplating, 2; enameling and enameled goods, 1; engraving, wood, 1; explosives, 1; fertilizers, 1; gas and lamp fixtures, 2; glass, cutting, staining, and ornamenting, 2; glucose, 2; hand stamps, 2; hardware, saddlery, 1; hats and caps, not including fur hats, and wool hats, 1; hosiery and knit goods, 2; lamps and reflectors, 2; lead, smelting and refining, 1; leather, tanned, curried, and finished, 2; malt, 2; mantels, slate, marble, and marbleized, 1; mirrors, 1; musical instruments, organs and materials, 1;

TABLE 8.—MANUFACTURES IN CITIES

BURLINGTON.

| 1 All industries | 840 | \$5,235,624 | \$1,284,792 | \$499,200 | \$1,169,568 | \$2,282,069 | 358 | 903 | \$203,540 | 2,598 | \$1,013,998 | |
|---|-----|-------------|-------------|-----------|-------------|-------------|-----|-----|-----------|-------|-------------|--|
| 2 Blacksmithing and wheelwrighting | 12 | 10,065 | 2,175 | 3,175 | 2,220 | 2,495 | 16 | | | 14 | 6,524 | |
| 3 Boots and shoes, custom work and repairing. | 16 | 4,165 | 800 | 700 | 1,490 | 1,175 | 18 | | | 5 | 2,156 | |
| 4 Bread and other bakery products. | 7 | 14,150 | 1,200 | 2,150 | 6,100 | 4,700 | 10 | 10 | 8,902 | 42 | 17,539 | |
| 5 Carpentering. | 33 | 36,970 | 2,145 | 2,350 | 5,410 | 27,065 | 36 | | | 148 | 81,134 | |
| 6 Carpets, rag. | 3 | 7,360 | 1,675 | 3,160 | 1,600 | 1,025 | 4 | | | 2 | 936 | |
| 7 Carriage and wagon materials. | 3 | 58,250 | 6,500 | 12,800 | 16,100 | 17,850 | 2 | | | 33 | 25,727 | |
| 8 Carriages and wagons. | 9 | 260,444 | 31,000 | 41,139 | 40,976 | 150,329 | 6 | 11 | 13,636 | 186 | 73,615 | |
| 9 Cars and general shop construction and repairs by steam railroad companies. | 3 | 53,544 | 3,200 | 85,150 | 10,570 | 4,624 | | 7 | 6,240 | 60 | 82,335 | |
| 10 Clothing, men's, custom work and repairing. | 13 | 29,797 | 3,500 | 1,000 | 1,560 | 23,737 | 17 | 3 | 3,360 | 61 | 24,971 | |
| 11 Clothing, women's, dressmaking. | 18 | 8,895 | 20 | 40 | 1,470 | 2,365 | 22 | | | 60 | 7,785 | |
| 12 Confectionery. | 3 | 138,041 | | | 88,150 | 49,891 | 1 | 28 | 17,025 | 71 | 19,418 | |
| 13 Foundry and machine shop products. | 3 | 871,684 | 19,047 | 70,328 | 120,508 | 161,801 | 2 | 9 | 11,850 | 310 | 149,763 | |
| 14 Furniture, cabinetmaking, repairing, and upholstering. | 4 | 1,568 | | | 248 | 1,320 | 5 | 1 | 650 | 5 | 2,783 | |
| 15 Furniture, factory product. | 6 | 332,921 | 19,100 | 53,000 | 68,263 | 102,558 | 2 | 41 | 24,124 | 287 | 75,837 | |
| 16 Liquors, malt. | 3 | 123,000 | 12,000 | 63,000 | 24,000 | 24,000 | 4 | 2 | 2,000 | 28 | 15,500 | |
| 17 Liquors, vinous. | 6 | 2,100 | 160 | 910 | 715 | 315 | 6 | | | 2 | 578 | |
| 18 Lock and gun smithing. | 4 | 4,335 | 2,800 | 400 | 800 | 835 | 5 | | | 1 | 200 | |
| 19 Lumber and timber products. | 3 | 2,163,698 | 1,050,795 | 46,469 | 85,244 | 971,190 | 1 | 18 | 13,940 | 220 | 83,418 | |
| 20 Marble and stone work. | 3 | 2,500 | 600 | 200 | 500 | 1,200 | 3 | | | 10 | 8,750 | |
| 21 Masonry, brick and stone. | 13 | 2,985 | | | 1,005 | 1,980 | 16 | | | 32 | 13,923 | |
| 22 Millinery, custom work. | 11 | 21,454 | | | 1,554 | 19,900 | 12 | | | 33 | 8,621 | |
| 23 Monuments and tombstones. | 4 | 28,990 | 2,000 | 150 | 1,690 | 25,150 | 5 | 5 | 2,800 | 17 | 8,590 | |
| 24 Painting, house, sign, etc. | 23 | 19,543 | 625 | 730 | 4,433 | 13,755 | 29 | 3 | 2,730 | 57 | 24,463 | |
| 25 Paper hanging. | 4 | 7,430 | | | 4,700 | 7,010 | 3 | 1 | 400 | 7 | 3,747 | |
| 26 Paving and paving materials. | 3 | 11,260 | | | 160 | 11,100 | 3 | | | 12 | 7,153 | |
| 27 Photography. | 6 | 7,800 | | | 3,800 | 4,000 | 8 | 1 | 100 | 5 | 2,132 | |
| 28 Plastering and stucco work. | 6 | 880 | | | 770 | 60 | 6 | | | 10 | 3,270 | |
| 29 Plumbing, and gas and steam fitting. | 5 | 30,401 | 3,000 | 3,000 | 3,250 | 21,151 | 5 | 3 | 1,219 | 27 | 11,513 | |
| 30 Printing and publishing, book and job. | 5 | 63,362 | | | 42,245 | 21,117 | 2 | 20 | 14,694 | 60 | 16,791 | |
| 31 Printing and publishing, newspapers and periodicals. | 6 | 111,351 | 1,000 | 2,500 | 74,000 | 33,851 | 3 | 35 | 20,730 | 56 | 85,801 | |
| 32 Saddlery and harness. | 10 | 59,655 | | | 11,630 | 48,025 | 11 | 26 | 6,500 | 78 | 24,532 | |
| 33 Tinsmithing, coppersmithing, and sheet-iron working. | 10 | 13,230 | 400 | 1,250 | 3,080 | 8,500 | 9 | 1 | 624 | 29 | 14,617 | |
| 34 Tobacco, cigars and cigarettes. | 22 | 45,299 | 3,150 | 2,000 | 2,011 | 38,188 | 21 | 8 | 5,330 | 126 | 47,674 | |
| 35 Watch, clock, and jewelry repairing. | 10 | 5,325 | | | 3,225 | 2,100 | 10 | | | 7 | 4,430 | |
| 36 All other industries ¹ . | 50 | 1,194,172 | 113,000 | 163,599 | 540,316 | 382,257 | 55 | 70 | 51,686 | 497 | 182,607 | |

¹ Embraces awnings, tents, and sails, 1; baskets, and rattan and willow ware, 1; bells, 1; bicycle and tricycle repairing, 2; bookbinding and blank book making, 2; bottling, 1; boxes, cigar, 2; boxes, wooden packing, 2; brick and tile, 2; brooms and brushes, 2; buttons, 1; clothing, men's, factory product, 1; coffee and spice, roasting and grinding, 2; coffins, burial cases, and undertakers' goods, 1; cooperage, 2; dyeing and cleaning, 1; flouring and grist mill products, 1; fruits and vegetables, canning and preserving, 1; fur goods, 1; gas, illuminating and heating, 1; looking-glass and picture frames, 1; lumber, planing mill products, including sash,

CEDAR RAPIDS.

| 1 All industries | 241 | \$6,256,801 | \$475,675 | \$1,314,867 | \$1,390,512 | \$3,076,747 | 281 | 336 | \$236,448 | 3,105 | \$1,313,821 |
|---|-----|-------------|-----------|-------------|-------------|-------------|-----|-----|-----------|-------|-------------|
| 2 Bicycle and tricycle repairing. | 9 | 5,130 | | | 1,495 | 3,635 | 12 | | | 8 | 3,000 |
| 3 Blacksmithing and wheelwrighting. | 14 | 18,595 | 8,800 | 4,010 | 2,175 | 8,610 | 16 | | | 13 | 10,220 |
| 4 Boots and shoes, custom work and repairing. | 8 | 1,290 | 350 | 50 | 695 | 165 | 9 | | | | |
| 5 Bread and other bakery products. | 8 | 134,110 | 28,100 | 27,000 | 18,320 | 60,690 | 9 | 21 | 15,140 | 122 | 40,114 |
| 6 Brick and tile. | 3 | 19,900 | 4,900 | 4,800 | 5,100 | 5,100 | 4 | 1 | 890 | 20 | 9,415 |

SPECIFIED INDUSTRIES: 1900—Continued.

| AVERAGE NUMBER OF WAGE-EARNERS AND TOTAL WAGES—continued. | | | | | | MISCELLANEOUS EXPENSES. | | | | | COST OF MATERIALS USED. | | | Value of products, including custom work and repairing. | |
|---|---------|---------------------------|---------|---------------------------|--------|-------------------------|----------------|--|---------------------------------|----------------|-------------------------|---|----------------------------------|---|-----|
| Men, 16 years and over. | | Women, 16 years and over. | | Children, under 16 years. | | Total. | Rent of works. | Taxes, not including internal revenue. | Rent of offices, interest, etc. | Contract work. | Total. | Principal materials, including mill supplies and freight. | Fuel and rent of power and heat. | | |
| Average number. | Wages. | Average number. | Wages. | Average number. | Wages. | | | | | | | | | | |
| 25 | \$9,600 | | | 5 | \$520 | \$1,878 | \$396 | \$92 | \$1,390 | | \$22,900 | \$21,745 | \$1,155 | \$46,550 | 112 |
| 254 | 180,017 | 4 | \$1,055 | 6 | 614 | 65,264 | 44,041 | 4,535 | 15,161 | \$1,527 | 147,361 | 141,191 | 6,170 | 625,283 | 118 |
| 69 | 41,705 | 8 | 1,406 | | | 7,431 | 652 | 1,006 | 5,773 | | 62,016 | 61,030 | 986 | 129,689 | 114 |
| 2 | 1,024 | | | | | 285 | 105 | 30 | 100 | | 3,545 | 3,545 | | 6,200 | 115 |
| 100 | 89,884 | | | 3 | 1,100 | 24,708 | 2,592 | 608 | 21,508 | | 226,015 | 222,419 | 3,596 | 870,669 | 116 |
| 48 | 14,500 | | | | | 1,606 | 237 | 187 | 1,192 | | 18,280 | 16,546 | 1,734 | 64,036 | 117 |
| 126 | 89,576 | 128 | 24,647 | 2 | 378 | 10,831 | 650 | 2,729 | 18,455 | | 175,426 | 169,383 | 6,043 | 296,500 | 118 |
| 1,379 | 673,630 | 146 | 26,141 | 30 | 3,441 | 850,842 | 21,172 | 12,148 | 270,009 | 47,513 | 3,621,494 | 3,403,420 | 218,074 | 5,700,337 | 119 |

oil, not elsewhere specified, 1; oysters, canning and preserving, 1; paper goods, not elsewhere specified, 2; paper hangings, 1; pens, fountain, and stylographic, 1; photographic materials, 2; pipes, tobacco, 1; plumbers' supplies, 1; printing and publishing, music, 2; pumps, not including steam pumps, 2; refrigerators, 1; saws, 1; shipbuilding, iron and steel, 1; stereotyping and electrotyping, 2; surgical appliances, 2; tobacco, chewing, smoking, and snuff, 2; toys and games, 1; typewriters and supplies, 1; typewriter repairing, 1; woodenware, not elsewhere specified, 2.

BY SPECIFIED INDUSTRIES: 1900.

BURLINGTON.

| | | | | | | | | | | | | | | | |
|-------|-----------|-----|----------|----|----------|-----------|----------|----------|-----------|----------|-------------|-------------|----------|-------------|----|
| 2,199 | \$945,808 | 812 | \$56,744 | 87 | \$11,951 | \$414,819 | \$58,785 | \$22,350 | \$305,053 | \$38,631 | \$2,309,636 | \$2,753,641 | \$55,895 | \$5,334,196 | 1 |
| 18 | 6,426 | | | 1 | 98 | 928 | 832 | 47 | 49 | | 4,643 | 4,131 | 512 | 24,514 | 2 |
| 5 | 2,156 | | | | | 1,238 | 964 | 9 | 265 | | 4,735 | 4,576 | 160 | 13,455 | 3 |
| 86 | 16,264 | | | 6 | 1,275 | 6,347 | 2,432 | 58 | 3,852 | | 36,768 | 35,686 | 1,082 | 81,678 | 4 |
| 148 | 81,134 | | | | | 32,933 | 1,577 | 53 | 1,959 | 29,939 | 156,692 | 156,685 | 57 | 314,925 | 5 |
| 2 | 936 | | | | | 221 | 44 | 30 | 147 | | 1,010 | 899 | 111 | 4,600 | 6 |
| 82 | 25,313 | 1 | 414 | | | 2,541 | 84 | 727 | 1,730 | | 114,209 | 112,563 | 1,646 | 162,875 | 7 |
| 182 | 72,853 | 4 | 762 | | | 8,453 | 1,640 | 2,216 | 4,632 | | 248,867 | 246,470 | 1,897 | 429,201 | 8 |
| 60 | 92,835 | | | | | 730 | | 290 | 440 | | 34,947 | 33,003 | 1,944 | 74,302 | 9 |
| 56 | 23,920 | 3 | 791 | 2 | 260 | 4,330 | 2,623 | 332 | 1,370 | | 23,820 | 23,538 | 491 | 83,299 | 10 |
| | | 60 | 7,785 | | | 2,120 | 1,814 | 57 | 249 | | 4,008 | 3,740 | 268 | 22,947 | 11 |
| 80 | 13,600 | 41 | 5,613 | | | 16,508 | 2,700 | 304 | 13,694 | | 90,638 | 87,773 | 2,865 | 197,563 | 12 |
| 309 | 149,563 | | | 1 | 200 | 7,724 | 260 | 1,232 | 6,232 | | 224,205 | 209,970 | 14,235 | 476,315 | 13 |
| 5 | 2,783 | | | | | 368 | 265 | 10 | 93 | | 4,517 | 4,492 | 25 | 11,080 | 14 |
| 206 | 71,325 | 8 | 1,200 | 23 | 3,362 | 17,661 | 3,950 | 1,305 | 12,406 | | 177,656 | 173,196 | 4,460 | 332,935 | 15 |
| 28 | 15,500 | | | | | 31,487 | | 770 | 30,717 | | 22,295 | 19,595 | 2,700 | 96,275 | 16 |
| 2 | 678 | | | 1 | 200 | 322 | 125 | 47 | 150 | | 1,410 | 1,410 | | 4,119 | 17 |
| | | | | | | 473 | 420 | 35 | 18 | | 408 | 266 | 142 | 3,100 | 18 |
| 219 | 83,135 | 1 | 283 | | | 127,727 | | 3,769 | 123,958 | | 539,804 | 539,804 | | 877,485 | 19 |
| 10 | 3,750 | | | | | 52 | | 10 | 42 | | 3,075 | 3,072 | 3 | 7,700 | 20 |
| 32 | 13,933 | | | | | 1,437 | 1,057 | | 330 | | 20,508 | 20,508 | | 45,286 | 21 |
| | | 33 | 8,621 | | | 5,482 | 4,641 | 204 | 637 | | 29,288 | 29,086 | 202 | 55,020 | 22 |
| 17 | 8,590 | | | | | 4,211 | 590 | 113 | 3,203 | | 31,549 | 31,321 | 228 | 60,966 | 23 |
| 57 | 24,463 | | | | | 3,978 | 2,213 | 101 | 1,604 | | 23,581 | 23,466 | 115 | 73,995 | 24 |
| 7 | 3,747 | | | | | 857 | 460 | 84 | 313 | | 6,525 | 6,495 | 30 | 14,925 | 25 |
| 12 | 7,153 | | | | | 427 | 260 | 2 | 165 | | 7,663 | 7,663 | | 27,750 | 26 |
| 2 | 1,092 | 3 | 1,040 | | | 2,037 | 1,368 | | 669 | | 4,763 | 4,533 | 230 | 24,965 | 27 |
| 10 | 3,270 | | | | | 644 | 455 | 3 | 186 | | 5,300 | 5,300 | | 12,705 | 28 |
| 27 | 11,513 | | | | | 2,188 | 1,125 | 250 | 313 | | 25,423 | 25,313 | 110 | 51,277 | 29 |
| 33 | 12,550 | 23 | 3,785 | 4 | 456 | 4,645 | 1,972 | 513 | 2,160 | | 22,243 | 20,858 | 1,385 | 71,100 | 30 |
| 50 | 84,336 | 4 | 1,300 | 2 | 165 | 9,231 | 2,108 | 280 | 6,301 | 42 | 51,627 | 49,067 | 2,560 | 150,688 | 31 |
| 75 | 24,038 | | | 3 | 494 | 10,778 | 2,567 | 495 | 7,716 | | 80,968 | 80,030 | 933 | 160,658 | 32 |
| 29 | 14,617 | | | | | 1,820 | 1,214 | 79 | 127 | 400 | 17,235 | 16,850 | 385 | 40,210 | 33 |
| 92 | 43,454 | | | 34 | 4,220 | 22,864 | 3,850 | 243 | 18,771 | | 59,133 | 57,760 | 364 | 149,606 | 34 |
| 7 | 4,490 | | | | | 2,092 | 1,330 | 20 | 82 | 50 | 1,003 | 933 | 20 | 13,000 | 35 |
| 856 | 136,436 | 131 | 24,950 | 10 | 1,221 | 79,840 | 7,940 | 8,662 | 60,038 | 3,200 | 725,511 | 703,781 | 16,730 | 1,163,674 | 36 |

doors and blinds, 2; mantels, slate, marble, and marbleized, 2; mineral and soda waters, 2; models and patterns, 1; musical instruments, organs and materials, 1; patent medicines and compounds, 1; pens, fountain, and stylographic, 1; perfumery and cosmetics, 1; pickles, preserves, and sauces, 2; rubber and elastic goods, 1; ship and boat building, wooden, 2; shirts, 1; slaughtering and meat packing, wholesale, 1; soap and candles, 1; trunks and valises, 1; wirework, including wire rope and cable, 1; wood, turned and curved, 1.

CEDAR RAPIDS.

| | | | | | | | | | | | | | | | |
|-------|-------------|-----|----------|-----|----------|-----------|----------|----------|-----------|----------|-------------|-------------|----------|--------------|---|
| 2,543 | \$1,193,715 | 442 | \$97,026 | 120 | \$23,080 | \$518,455 | \$43,800 | \$18,033 | \$403,453 | \$48,164 | \$3,969,992 | \$3,874,536 | \$95,406 | \$12,715,897 | 1 |
| 8 | 3,000 | | | | | 1,233 | 933 | 8 | 257 | | 5,866 | 5,797 | 69 | 15,835 | 2 |
| 18 | 10,220 | | | | | 1,624 | 910 | 232 | 482 | | 9,941 | 8,779 | 1,162 | 36,443 | 3 |
| | | | | | | 536 | 528 | 5 | 3 | | 2,437 | 2,330 | 57 | 7,700 | 4 |
| 61 | 30,974 | 61 | 9,140 | | | 11,279 | 1,356 | 1,323 | 7,234 | 1,361 | 223,762 | 224,772 | 4,990 | 395,237 | 5 |
| 20 | 9,415 | | | | | 635 | 200 | 200 | 235 | | 4,591 | 755 | 3,836 | 28,000 | 6 |

TABLE 8.—MANUFACTURES IN CITIES

CEDAR RAPIDS—Continued.

| MANUFACTURING AND MECHANICAL INDUSTRIES. | Number of establishments. | CAPITAL. | | | | | Proprietors and firm members. | SALARIED OFFICIALS, CLERKS, ETC. | | AVERAGE NUMBER OF WAGE-EARNERS AND TOTAL WAGES. | |
|---|---------------------------|-----------|----------|------------|-----------------------------------|--------------------|-------------------------------|----------------------------------|-----------|---|-----------|
| | | Total. | Land. | Buildings. | Machinery, tools, and implements. | Cash and sundries. | | Number. | Salaries. | Total. | |
| | | | | | | | | | | Average number. | Wages. |
| 7 Carpentering | 23 | \$118,760 | \$19,500 | \$14,425 | \$12,310 | \$72,525 | 28 | 4 | \$2,300 | 308 | \$131,246 |
| 8 Carpets, rag | 3 | 3,645 | 2,000 | 1,000 | 440 | 105 | 3 | | | 5 | 1,650 |
| 9 Carriages and wagons | 8 | 30,250 | 3,600 | 8,800 | 1,850 | 16,000 | 9 | | | 19 | 18,290 |
| 10 Clothing, men's, custom work and repairing. | 8 | 28,216 | | | 2,810 | 25,406 | 7 | 1 | 936 | 67 | 19,798 |
| 11 Clothing, women's, dressmaking | 3 | 3,095 | | | 595 | 2,500 | 3 | | | 15 | 3,270 |
| 12 Confectionery | 8 | 45,400 | 6,000 | 400 | 5,700 | 33,300 | 8 | 10 | 8,800 | 39 | 14,170 |
| 13 Dyeing and cleaning | 3 | 5,950 | | 900 | 3,600 | 1,450 | 3 | | | 3 | 4,324 |
| 14 Flouring and grist mill products | 4 | 73,500 | 13,500 | 10,000 | 32,000 | 13,000 | 4 | 5 | 5,200 | 19 | 10,985 |
| 15 Foundry and machine shop products | 8 | 319,752 | 22,000 | 24,850 | 36,916 | 235,986 | 8 | 16 | 17,320 | 105 | 46,200 |
| 16 Furniture, cabinetmaking, repairing, and upholstering. | 8 | 2,700 | | 1,300 | 550 | 850 | 4 | | | 2 | 1,600 |
| 17 Furniture, factory product | 5 | 100,413 | 12,000 | 18,376 | 21,750 | 47,787 | 4 | 13 | 12,840 | 123 | 38,545 |
| 18 Masonry, brick and stone | 4 | 23,150 | 2,500 | 2,500 | 1,250 | 16,900 | 4 | 2 | 1,000 | 40 | 24,995 |
| 19 Millinery, custom work | 3 | 20,575 | 1,000 | 2,500 | 2,075 | 15,000 | 11 | 4 | 1,032 | 46 | 12,419 |
| 20 Monuments and tombstones | 5 | 33,250 | 5,000 | 4,750 | 1,100 | 22,400 | 5 | 13 | 4,360 | 11 | 6,825 |
| 21 Painting, house, sign, etc | 5 | 43,030 | 12,000 | 6,000 | 2,050 | 22,950 | 8 | 5 | 2,530 | 33 | 17,440 |
| 22 Paving and paving materials | 5 | 36,200 | 10,800 | 2,000 | 5,900 | 17,500 | 7 | 1 | 300 | 63 | 29,312 |
| 23 Photography | 9 | 15,375 | 4,000 | 4,050 | 4,850 | 2,375 | 9 | | | 7 | 2,680 |
| 24 Plumbing, and gas and steam fitting | 6 | 23,225 | 2,000 | 4,000 | 2,725 | 17,500 | 11 | 3 | 1,177 | 29 | 15,230 |
| 25 Printing and publishing, book and job | 5 | 42,514 | | | 28,914 | 15,700 | 6 | 3 | 8,023 | 54 | 21,898 |
| 26 Printing and publishing, newspapers and periodicals. | 10 | 144,270 | 10,000 | 16,000 | 60,154 | 58,116 | 7 | 41 | 40,847 | 105 | 46,106 |
| 27 Saddlery and harness | 5 | 22,313 | 250 | 250 | 1,100 | 20,713 | 7 | 3 | 1,640 | 10 | 4,486 |
| 28 Tinsmithing, coppersmithing, and sheet-iron working. | 13 | 105,425 | 26,200 | 17,900 | 14,625 | 47,800 | 19 | 4 | 8,000 | 58 | 30,634 |
| 29 Tobacco, cigars and cigarettes | 9 | 11,032 | 1,000 | 1,500 | 660 | 7,872 | 11 | 1 | 200 | 22 | 9,694 |
| 30 Watch, clock, and jewelry repairing | 9 | 27,725 | 7,750 | 4,450 | 5,825 | 9,700 | 12 | 1 | 900 | 14 | 7,325 |
| 31 All other industries ¹ | 40 | 4,794,741 | 272,425 | 1,133,156 | 1,115,143 | 2,274,012 | 38 | 134 | 162,758 | 1,750 | 731,975 |

¹ Embraces awnings, tents, and sails, 2; bookbinding and blank book making, 1; bottling, 1; boxes, fancy and paper, 1; brooms and brushes, 1; cars and general shop construction and repairs by steam railroad companies, 2; cheese, butter, and condensed milk, factory product, 2; cleansing and polishing preparations, 1; clothing, men's, factory product, 1; clothing, women's, factory product, 1; coffee and spice, roasting and grinding, 1; cutlery and edge tools, 1; electrical construction and repairs, 1; food preparations, 2; fruits and vegetables, canning and preserving, 1; fur goods, 1; furs, dressed, 1; gas, illuminating and heating, 1; hairwork, 1;

CLINTON.

| | | | | | | | | | | | |
|--|-----|-------------|-----------|-----------|-----------|-------------|-----|-----|-----------|-------|-------------|
| 1 All industries | 224 | \$4,537,200 | \$483,115 | \$333,806 | \$777,119 | \$2,933,160 | 208 | 202 | \$232,612 | 3,080 | \$1,137,019 |
| 2 Bicycle and tricycle repairing | 3 | 2,200 | | | 900 | 1,300 | 3 | | | 5 | 2,000 |
| 3 Blacksmithing and wheelwrighting | 13 | 12,725 | 3,900 | 4,200 | 2,325 | 2,800 | 16 | | | 12 | 7,240 |
| 4 Boots and shoes, custom work and repairing. | 16 | 4,610 | 550 | 1,100 | 1,635 | 1,225 | 16 | | | 4 | 1,300 |
| 5 Bread and other bakery products | 9 | 57,602 | 2,314 | 17,000 | 13,224 | 24,564 | 9 | 6 | 7,941 | 42 | 13,731 |
| 6 Carpentering | 7 | 12,750 | | 100 | 3,125 | 9,625 | 7 | | | 89 | 34,760 |
| 7 Carriages and wagons | 4 | 261,700 | 18,000 | 5,000 | 22,200 | 216,500 | 3 | 11 | 14,150 | 118 | 52,461 |
| 8 Clothing, men's, custom work and repairing. | 12 | 36,178 | 4,000 | 8,300 | 2,472 | 21,406 | 13 | 2 | 1,800 | 56 | 18,215 |
| 9 Clothing, women's, dressmaking | 6 | 3,500 | 500 | 2,000 | 1,200 | 4,800 | 6 | | | 69 | 12,846 |
| 10 Confectionery | 3 | 7,600 | | 200 | 4,300 | 3,100 | 3 | | | 9 | 3,040 |
| 11 Flouring and grist mill products | 5 | 31,150 | 3,400 | 6,500 | 3,600 | 12,650 | 5 | 3 | 2,040 | 12 | 6,420 |
| 12 Foundry and machine shop products | 5 | 81,310 | 10,300 | 12,000 | 36,610 | 23,000 | 6 | 5 | 4,500 | 42 | 16,155 |
| 13 Furniture, cabinetmaking, repairing, and upholstering. | 3 | 3,700 | 500 | 1,300 | 500 | 900 | 3 | | | 1 | 400 |
| 14 Furniture, factory product | 4 | 155,469 | 19,000 | 27,507 | 13,400 | 90,562 | 1 | 14 | 15,682 | 136 | 41,337 |
| 15 Lumber, planing mill products, including sash, doors, and blinds. | 3 | 626,950 | 27,500 | 39,400 | 53,330 | 504,720 | 3 | 21 | 25,600 | 415 | 148,191 |
| 16 Masonry, brick and stone | 5 | 5,095 | 4,000 | | 1,095 | | 5 | | | 20 | 8,935 |
| 17 Millinery, custom work | 9 | 15,940 | 1,200 | 3,800 | 390 | 10,550 | 10 | 2 | 1,100 | 36 | 8,436 |
| 18 Monuments and tombstones | 3 | 7,300 | 2,500 | 500 | 450 | 4,850 | 3 | | | 5 | 2,550 |
| 19 Painting, house, sign, etc | 13 | 15,115 | 200 | 500 | 2,970 | 11,445 | 14 | | | 33 | 17,612 |
| 20 Photography | 7 | 10,375 | | 150 | 5,100 | 5,025 | 8 | | | 9 | 2,330 |
| 21 Plumbing, and gas and steam fitting | 5 | 14,415 | 1,800 | | 1,515 | 11,100 | 6 | 1 | 600 | 16 | 7,410 |
| 22 Printing and publishing, book and job | 3 | 23,300 | 1,500 | 3,500 | 14,000 | 6,300 | 2 | 3 | 4,475 | 15 | 4,963 |
| 23 Printing and publishing, newspapers and periodicals. | 8 | 109,050 | 3,650 | 7,100 | 46,101 | 52,199 | 5 | 19 | 19,443 | 89 | 31,176 |
| 24 Saddlery and harness | 5 | 31,475 | 500 | 2,000 | 5,675 | 73,300 | 3 | 6 | 6,950 | 41 | 14,594 |
| 25 Tinsmithing, coppersmithing, and sheet-iron working. | 12 | 33,000 | 5,900 | 8,775 | 5,550 | 12,775 | 9 | 1 | 540 | 31 | 15,779 |
| 26 Tobacco, cigars and cigarettes | 12 | 24,775 | 2,200 | 4,000 | 875 | 17,700 | 12 | | | 30 | 11,090 |
| 27 Watch, clock, and jewelry repairing | 3 | 3,620 | 300 | 750 | 2,400 | 5,170 | 5 | | | 10 | 5,210 |
| 28 All other industries ¹ | 41 | 2,882,796 | 373,901 | 177,624 | 520,177 | 1,811,094 | 32 | 103 | 127,736 | 1,730 | 646,730 |

¹ Embraces awnings, tents, and sails, 1; boxes, wooden packing, 2; brick and tile, 2; bridges, 1; brooms and brushes, 2; buttons, 2; cars and general shop construction and repairs by steam railroad companies, 1; cooperage, 1; dyeing and cleaning, 2; fur goods, 2; gas, illuminating and heating, 1; grease and tallow, 1; hairwork, 1; hardware, 1; ironwork, architectural and ornamental, 1; kindling wood, 2; liquors, malt, 2; looking-glass and picture frames, 2; lumber and timber

BY SPECIFIED INDUSTRIES: 1900—Continued.

CEDAR RAPIDS—Continued.

| AVERAGE NUMBER OF WAGE-EARNERS AND TOTAL WAGES—continued. | | | | | | MISCELLANEOUS EXPENSES. | | | | | COST OF MATERIALS USED. | | | Value of products, including custom work and repairing. | |
|---|-----------|---------------------------|--------|---------------------------|--------|-------------------------|----------------|--|---------------------------------|----------------|-------------------------|---|----------------------------------|---|----|
| Men, 16 years and over. | | Women, 16 years and over. | | Children, under 16 years. | | Total. | Rent of works. | Taxes, not including internal revenue. | Rent of offices, interest, etc. | Contract work. | Total. | Principal materials, including mill supplies and freight. | Fuel and rent of power and heat. | | |
| Average number. | Wages. | Average number. | Wages. | Average number. | Wages. | | | | | | | | | | |
| 308 | \$191,246 | | | | | \$93,365 | \$2,922 | \$649 | \$1,844 | \$93,650 | \$435,959 | \$494,903 | \$966 | \$697,300 | 7 |
| 3 | 1,250 | 2 | \$400 | | | 311 | 118 | 33 | 100 | | 979 | 914 | 65 | 4,600 | 8 |
| 19 | 18,290 | | | | | 822 | 240 | 142 | 440 | | 14,680 | 14,190 | 490 | 48,390 | 9 |
| 55 | 19,443 | 1 | 200 | 1 | \$150 | 4,661 | 3,906 | 123 | 632 | | 20,208 | 28,881 | 827 | 84,930 | 10 |
| 1 | 300 | 14 | 2,970 | | | 1,430 | 684 | 100 | 646 | | 12,899 | 12,775 | 124 | 20,100 | 11 |
| 16 | 9,170 | 23 | 5,000 | | | 4,655 | 1,920 | 160 | 2,575 | | 54,170 | 53,110 | 1,000 | 94,880 | 12 |
| 6 | 3,700 | 2 | 624 | | | 1,642 | 936 | 12 | 691 | | 1,865 | 1,405 | 460 | 13,800 | 13 |
| 19 | 10,985 | | | | | 5,772 | 60 | 744 | 4,968 | | 224,344 | 221,549 | 2,795 | 271,483 | 14 |
| 103 | 45,550 | 2 | 650 | | | 9,281 | 1,150 | 1,176 | 6,705 | 250 | 80,107 | 76,656 | 3,451 | 192,450 | 15 |
| 2 | 1,500 | | | | | 499 | 306 | 25 | 168 | | 9,145 | 9,030 | 65 | 18,000 | 16 |
| 107 | 33,950 | 1 | 315 | 15 | 4,280 | 12,619 | 300 | 468 | 11,611 | 240 | 120,540 | 118,480 | 2,110 | 270,450 | 17 |
| 40 | 24,995 | | | | | 3,840 | 850 | 50 | 440 | 2,700 | 30,370 | 29,870 | 500 | 77,686 | 18 |
| 1 | 300 | 44 | 11,903 | 1 | 150 | 4,948 | 3,630 | 207 | 1,091 | | 44,629 | 44,565 | 64 | 91,026 | 19 |
| 11 | 6,825 | | | | | 1,360 | 630 | 126 | 604 | | 31,010 | 30,895 | 115 | 73,800 | 20 |
| 33 | 17,440 | | | | | 2,222 | 678 | 267 | 1,277 | | 33,150 | 33,125 | 25 | 70,080 | 21 |
| 60 | 28,400 | 2 | 600 | 1 | 312 | 920 | 222 | 98 | 600 | | 24,424 | 24,124 | 300 | 68,780 | 22 |
| 3 | 1,460 | 4 | 1,220 | | | 3,390 | 2,814 | 144 | 302 | 100 | 4,520 | 4,350 | 170 | 22,760 | 23 |
| 29 | 15,260 | | | | | 1,446 | 755 | 187 | 504 | | 35,242 | 35,005 | 237 | 67,125 | 24 |
| 44 | 19,298 | 10 | 2,600 | | | 4,417 | 2,600 | 295 | 1,462 | | 23,563 | 23,307 | 256 | 71,803 | 25 |
| 88 | 40,026 | 21 | 5,900 | 1 | 180 | 19,692 | 4,157 | 628 | 9,344 | 5,563 | 43,134 | 41,317 | 1,817 | 191,062 | 26 |
| 10 | 4,486 | | | | | 2,278 | 1,110 | 195 | 968 | | 12,707 | 12,592 | 115 | 23,808 | 27 |
| 47 | 20,309 | 6 | 1,375 | | | 6,315 | 1,176 | 692 | 4,447 | | 102,598 | 101,323 | 1,275 | 133,825 | 28 |
| 17 | 8,474 | 5 | 1,220 | | | 6,141 | 1,195 | 80 | 4,866 | | 14,559 | 14,339 | 220 | 38,353 | 29 |
| 14 | 7,325 | | | | | 1,460 | 860 | 242 | 358 | | 6,950 | 6,800 | 150 | 25,240 | 30 |
| 1,405 | 661,124 | 244 | 52,849 | 101 | 18,002 | 364,947 | 7,689 | 9,417 | 343,541 | 4,400 | 7,826,043 | 7,269,508 | 67,135 | 9,510,896 | 31 |

lime and cement, 1; liquors, malt, 1; lumber and timber products, 1; marble and stone work, 1; mattresses and spring beds, 1; mineral and soda waters, 2; oil, linned, 1; patent medicines and compounds, 2; photographic materials, 1; pumps, not including steam pumps, 1; roofing and roofing materials, 1; slaughtering and meat packing, wholesale, 1; wirework, including wire rope and cable, 2; woodenware, not elsewhere specified, 1.

CLINTON.

| | | | | | | | | | | | | | | | |
|-------|-------------|-----|----------|----|----------|-----------|----------|----------|-----------|---------|-------------|-------------|----------|-------------|----|
| 2,738 | \$1,068,104 | 245 | \$51,608 | 97 | \$17,307 | \$370,141 | \$30,379 | \$49,652 | \$286,690 | \$3,650 | \$4,247,057 | \$4,194,957 | \$52,100 | \$6,989,473 | 1 |
| 5 | 2,000 | | | | | 670 | 500 | 5 | 165 | | 3,275 | 3,260 | 15 | 8,400 | 2 |
| 12 | 7,240 | | | | | 1,273 | 845 | 103 | 320 | | 7,142 | 6,580 | 562 | 26,980 | 3 |
| 4 | 1,300 | | | | | 1,058 | 937 | 28 | 93 | | 3,664 | 3,500 | 164 | 13,028 | 4 |
| 20 | 10,007 | 21 | 3,674 | 1 | 50 | 13,067 | 973 | 230 | 11,864 | | 33,317 | 31,084 | 2,233 | 155,295 | 5 |
| 89 | 34,750 | | | | | 769 | 99 | | 670 | | 89,620 | 89,400 | 220 | 140,420 | 6 |
| 112 | 51,480 | 5 | 781 | 1 | 200 | 36,474 | 780 | 602 | 35,092 | | 142,980 | 138,550 | 4,380 | 318,940 | 7 |
| 41 | 14,630 | 15 | 3,585 | | | 3,145 | 1,930 | 170 | 1,045 | | 31,435 | 30,885 | 550 | 78,350 | 8 |
| 6 | 3,120 | 69 | 12,846 | | | 336 | 211 | 36 | 89 | | 23,220 | 23,115 | 105 | 41,750 | 9 |
| 12 | 6,420 | 3 | 520 | | | 1,549 | 864 | 50 | 635 | | 12,452 | 12,008 | 444 | 23,000 | 10 |
| 42 | 16,155 | | | | | 2,724 | 84 | 430 | 2,210 | | 23,605 | 22,215 | 1,390 | 58,680 | 12 |
| 1 | 400 | | | | | 470 | 360 | 40 | 70 | | 1,850 | 1,760 | 90 | 4,775 | 13 |
| 120 | 33,339 | 5 | 784 | 11 | 2,274 | 14,120 | 925 | 1,133 | 12,062 | | 113,011 | 110,977 | 2,034 | 202,600 | 14 |
| 399 | 143,494 | 16 | 4,760 | 16 | 4,760 | 77,764 | 240 | 4,274 | 73,250 | | 561,047 | 560,822 | 225 | 1,063,851 | 15 |
| 20 | 8,935 | | | | | 1,650 | 24 | 75 | 51 | 1,500 | 2,810 | 2,810 | | 16,350 | 16 |
| 5 | 2,550 | 36 | 8,486 | | | 3,167 | 1,996 | 143 | 1,028 | | 28,867 | 28,672 | 195 | 55,050 | 17 |
| 28 | 17,612 | | | | | 298 | 98 | 50 | 150 | | 11,270 | 11,280 | 40 | 18,310 | 18 |
| 2 | 1,280 | 7 | 1,550 | | | 1,326 | 884 | 21 | 421 | | 16,789 | 16,729 | 60 | 54,490 | 19 |
| 16 | 7,410 | | | | | 1,887 | 1,220 | 36 | 631 | | 5,865 | 5,655 | 210 | 19,100 | 20 |
| 10 | 4,188 | 4 | 580 | 1 | 200 | 1,799 | 924 | 140 | 735 | | 22,455 | 22,385 | 70 | 40,000 | 21 |
| 57 | 24,486 | 14 | 5,350 | 18 | 1,340 | 1,022 | 194 | 185 | 643 | | 7,327 | 6,820 | 507 | 21,820 | 22 |
| 39 | 14,194 | 2 | 400 | | | 9,375 | 1,471 | 405 | 7,499 | | 21,608 | 20,181 | 1,327 | 95,496 | 23 |
| 30 | 15,695 | | | 1 | 84 | 6,046 | 1,795 | 203 | 3,958 | | 42,125 | 41,885 | 240 | 85,172 | 24 |
| 22 | 10,730 | | | | | 1,372 | 754 | 162 | 450 | | 34,347 | 33,850 | 497 | 69,785 | 25 |
| 10 | 5,210 | 3 | 585 | 5 | 675 | 6,131 | 1,041 | 182 | 4,908 | | 17,308 | 17,075 | 230 | 45,425 | 26 |
| 1,626 | 626,479 | 61 | 12,467 | 48 | 7,784 | 178,157 | 9,577 | 40,417 | 126,168 | 2,000 | 2,853,622 | 2,819,603 | 34,019 | 4,165,936 | 28 |

products, 2; mineral and soda waters, 2; paper and wood pulp, 2; patent medicines and compounds, 1; paving and paving materials, 1; pickles, preserves, and sauces, 1; sewing machine repairing, 1; ship and boat building, wooden, 1; slaughtering and meat packing, wholesale, 1; soap and candles, 1; wirework, including wire rope and cable, 1.

TABLE 8.—MANUFACTURES IN CITIES

COUNCIL BLUFFS.

| MANUFACTURING AND MECHANICAL INDUSTRIES. | Number of establishments. | CAPITAL. | | | | | Proprietors and firm members. | SALARIED OFFICIALS, CLERKS, ETC. | | AVERAGE NUMBER OF WAGE-EARNERS AND TOTAL WAGES. | |
|---|---------------------------|-------------|-----------|------------|-----------------------------------|--------------------|-------------------------------|----------------------------------|-----------|---|-----------|
| | | Total. | Land. | Buildings. | Machinery, tools, and implements. | Cash and sundries. | | Number. | Salaries. | Total. | |
| | | | | | | | | | | Average number. | Wages. |
| 1 All industries..... | 198 | \$1,176,408 | \$118,838 | \$188,162 | \$378,428 | \$400,980 | 213 | 126 | \$110,013 | 1,179 | \$609,065 |
| 2 Bicycle and tricycle repairing..... | 4 | 2,850 | | 150 | 1,175 | 1,525 | 3 | 1 | 270 | 6 | 2,800 |
| 3 Blacksmithing and wheelwrighting..... | 18 | 9,520 | 1,100 | 8,000 | 2,900 | 2,520 | 21 | | | 13 | 7,050 |
| 4 Boots and shoes, custom work and repairing..... | 14 | 3,410 | | 525 | 1,700 | 1,125 | 11 | | | 5 | 2,795 |
| 5 Bread and other bakery products..... | 8 | 20,900 | 8,000 | 7,000 | 3,150 | 2,750 | 9 | 1 | 300 | 15 | 7,820 |
| 6 Brick and tile..... | 6 | 70,650 | 10,400 | 23,000 | 8,250 | 29,000 | 8 | | | 42 | 21,500 |
| 7 Carpentering..... | 11 | 25,800 | 5,150 | 5,050 | 9,300 | 6,300 | 20 | | | 75 | 38,975 |
| 8 Carriages and wagons..... | 3 | 109,582 | 7,500 | 22,500 | 9,075 | 70,507 | 5 | 4 | 2,073 | 51 | 31,898 |
| 9 Cars and general shop construction and repairs by steam railroad companies..... | 8 | 47,049 | 6,700 | 13,050 | 9,350 | 17,939 | | 8 | 7,050 | 250 | 149,099 |
| 10 Clothing, men's, custom work and repairing..... | 11 | 14,475 | | 450 | 1,500 | 12,525 | 13 | | | 26 | 13,050 |
| 11 Dyeing and cleaning..... | 8 | 11,600 | 4,400 | 5,000 | 1,150 | 1,050 | 3 | 6 | 2,800 | 10 | 3,050 |
| 12 Millinery, custom work..... | 8 | 19,700 | 4,000 | 3,000 | 400 | 12,300 | 7 | 1 | 400 | 22 | 9,790 |
| 13 Monuments and tombstones..... | 3 | 13,100 | | 200 | 700 | 12,200 | 5 | | | 10 | 8,350 |
| 14 Painting, house, sign, etc..... | 9 | 14,350 | 4,000 | 2,000 | 1,480 | 6,870 | 9 | 1 | 500 | 25 | 13,424 |
| 15 Photography..... | 6 | 3,070 | | 150 | 2,000 | 920 | 6 | | | 3 | 1,350 |
| 16 Plumbing, and gas and steam fitting..... | 4 | 22,750 | | | 3,000 | 18,850 | 4 | 4 | 3,600 | 29 | 15,400 |
| 17 Printing and publishing, book and job..... | 4 | 10,950 | | | 9,100 | 1,850 | 5 | | | 11 | 4,854 |
| 18 Printing and publishing, newspapers and periodicals..... | 3 | 76,250 | 10,500 | 6,000 | 39,400 | 20,350 | 1 | 13 | 9,600 | 51 | 22,690 |
| 19 Saddlery and harness..... | 6 | 12,500 | 2,000 | 3,000 | 1,200 | 6,300 | 8 | | | 10 | 5,460 |
| 20 Tinsmithing, coppersmithing, and sheet-iron working..... | 9 | 21,175 | 8,000 | 4,000 | 4,225 | 4,950 | 6 | 8 | 10,000 | 34 | 16,181 |
| 21 Tobacco, cigars and cigarettes..... | 15 | 15,000 | 1,500 | 900 | 915 | 11,775 | 17 | | | 38 | 16,015 |
| 22 Watch, clock, and jewelry repairing..... | 6 | 4,200 | 400 | 400 | 2,750 | 650 | 3 | | | 4 | 2,700 |
| 23 All other industries..... | 46 | 647,407 | 45,188 | 88,787 | 264,708 | 248,724 | 49 | 79 | 73,420 | 446 | 215,086 |

1 Embraces agricultural implements, 1; awnings, tents, and sails, 1; axle grease, 1; baskets, and rattan and willow ware, 1; bookbinding and blank book making, 1; bottling, 1; bridges, 1; carpets, rag, 1; carriage and wagon materials, 1; cheese, butter, and condensed milk, factory product, 1; clothing, men's, factory product, 1; clothing, women's, dressmaking, 2; confectionery, 2; cooperage, 2; flouring and grist mill products, 2; food preparations, 1; foundry and machine shop products, 2; furniture, cabinetmaking, repairing, and upholstering, 2; furs, dressed, 1; gas, illuminating and heating, 1; lamps and reflectors, 2; looking-glass and

DAVENPORT.

| | | | | | | | | | | | |
|--|-----|--------------|-------------|-------------|-------------|-------------|-----|-----|-----------|-------|-------------|
| 1 All industries..... | 416 | \$10,774,707 | \$1,862,998 | \$2,157,400 | \$2,921,106 | \$9,838,194 | 456 | 468 | \$155,082 | 4,348 | \$1,892,787 |
| 2 Bicycle and tricycle repairing..... | 6 | 9,700 | | | 2,300 | 1,400 | 7 | | | 10 | 4,800 |
| 3 Blacksmithing and wheelwrighting..... | 24 | 21,714 | 5,850 | 4,700 | 4,140 | 7,524 | 27 | | | 31 | 17,216 |
| 4 Bookbinding and blank book making..... | 3 | 4,600 | | | 3,200 | 1,400 | 5 | | | 8 | 2,435 |
| 5 Boots and shoes, custom work and repairing..... | 17 | 5,190 | 1,200 | 1,700 | 1,245 | 1,045 | 20 | | | 8 | 8,200 |
| 6 Bread and other bakery products..... | 15 | 315,222 | 8,500 | 25,400 | 175,489 | 105,833 | 16 | 26 | 10,076 | 147 | 58,082 |
| 7 Brick and tile..... | 4 | 26,900 | 4,000 | 7,700 | 5,400 | 9,800 | 5 | 1 | 800 | 24 | 10,785 |
| 8 Brooms and brushes..... | 3 | 18,875 | 50 | 350 | 2,275 | 16,200 | 2 | 9 | 9,747 | 45 | 13,829 |
| 9 Buttons..... | 5 | 69,484 | 4,000 | 6,128 | 17,507 | 41,789 | 4 | 7 | 5,121 | 235 | 74,785 |
| 10 Carpentering..... | 34 | 71,606 | 10,955 | 7,795 | 16,446 | 30,410 | 42 | | | 190 | 102,937 |
| 11 Carpets, rag..... | 5 | 10,730 | 1,400 | 1,500 | 6,700 | 1,130 | 5 | 2 | 1,800 | 17 | 5,468 |
| 12 Carriages and wagons..... | 10 | 505,589 | 700 | 32,450 | 290,363 | 272,136 | 16 | 15 | 14,810 | 150 | 77,813 |
| 13 Clothing, men's, custom work and repairing..... | 19 | 19,700 | 2,750 | 600 | 2,035 | 14,375 | 24 | | | 35 | 37,690 |
| 14 Clothing, women's, dressmaking..... | 13 | 7,675 | 600 | 2,500 | 1,675 | 2,900 | 18 | | | 46 | 11,746 |
| 15 Confectionery..... | 3 | 3,700 | | | 2,625 | 875 | 3 | 2 | 600 | 7 | 2,650 |
| 16 Cooperage..... | 4 | 34,500 | 4,200 | 8,700 | 4,800 | 16,800 | 4 | 2 | 1,400 | 32 | 10,836 |
| 17 Electrical construction and repairs..... | 3 | 12,140 | | | 840 | 11,300 | 3 | 5 | 3,850 | 18 | 7,115 |
| 18 Flouring and grist mill products..... | 5 | 184,800 | 17,600 | 62,800 | 58,000 | 56,400 | 4 | 11 | 10,568 | 24 | 13,427 |
| 19 Foundry and machine shop products..... | 11 | 682,970 | 68,675 | 75,100 | 159,631 | 330,164 | 7 | 45 | 48,607 | 494 | 205,046 |
| 20 Furniture, cabinetmaking, repairing and upholstering..... | 7 | 8,353 | | | 1,658 | 6,695 | 5 | 3 | 800 | 15 | 8,786 |
| 21 Lock and gun smithing..... | 3 | 2,050 | | | 1,600 | 450 | 3 | | | 2 | 1,224 |
| 22 Lumber, planing mill products, including sash, doors, and blinds..... | 3 | 94,882 | 3,000 | 9,220 | 11,850 | 70,812 | 2 | 8 | 8,300 | 74 | 89,297 |
| 23 Masonry, brick and stone..... | 10 | 115,020 | 10,737 | 1,500 | 6,405 | 96,378 | 13 | 5 | 9,780 | 188 | 75,615 |
| 24 Millinery, custom work..... | 10 | 18,160 | 1,000 | 900 | 200 | 16,000 | 12 | 3 | 1,400 | 53 | 14,095 |
| 25 Monuments and tombstones..... | 4 | 32,715 | | | 3,265 | 29,450 | 6 | 3 | 2,000 | 28 | 12,550 |
| 26 Painting, house, sign, etc..... | 19 | 12,355 | 2,660 | 5,515 | 1,670 | 2,510 | 20 | | | 41 | 23,120 |
| 27 Paper hanging..... | 6 | 1,350 | | | 300 | 850 | 7 | 6 | 2,000 | 33 | 17,500 |
| 28 Photography..... | 8 | 7,525 | | 190 | 4,450 | 3,075 | 9 | | | 14 | 8,125 |
| 29 Plastering and stucco work..... | 5 | 3,780 | | | 280 | 3,500 | 3 | | | 20 | 11,167 |
| 30 Plumbing, and gas and steam fitting..... | 10 | 32,168 | 1,700 | 4,300 | 4,820 | 21,348 | 11 | 4 | 1,905 | 53 | 25,122 |
| 31 Printing and publishing, book and job..... | 11 | 104,828 | 4,000 | 12,000 | 51,661 | 37,167 | 16 | 12 | 12,568 | 87 | 39,376 |
| 32 Printing and publishing, newspapers and periodicals..... | 7 | 129,650 | 3,000 | 4,500 | 60,650 | 61,500 | 3 | 37 | 28,498 | 97 | 59,411 |
| 33 Saddlery and harness..... | 9 | 42,130 | 8,050 | 12,400 | 2,480 | 19,200 | 9 | 3 | 1,072 | 39 | 18,510 |
| 34 Slaughtering and meat packing, wholesale..... | 3 | 227,750 | 25,000 | 75,000 | 20,000 | 107,750 | 1 | 9 | 6,700 | 63 | 24,694 |

BY SPECIFIED INDUSTRIES: 1900—Continued.

COUNCIL BLUFFS.

| AVERAGE NUMBER OF WAGE-EARNERS AND TOTAL WAGES—continued. | | | | | | MISCELLANEOUS EXPENSES. | | | | | COST OF MATERIALS USED. | | | Value of products, including custom work and repairing. | |
|---|-----------|---------------------------|----------|---------------------------|---------|-------------------------|----------------|--|---------------------------------|----------------|-------------------------|---|----------------------------------|---|----|
| Men, 16 years and over. | | Women, 16 years and over. | | Children, under 16 years. | | Total. | Rent of works. | Taxes, not including internal revenue. | Rent of offices, interest, etc. | Contract work. | Total. | Principal materials, including mill supplies and freight. | Fuel and rent of power and heat. | | |
| Average number. | Wages. | Average number. | Wages. | Average number. | Wages. | | | | | | | | | | |
| 1,034 | \$578,270 | 121 | \$27,865 | 24 | \$1,770 | \$160,871 | \$26,780 | \$8,129 | \$125,962 | | \$1,224,814 | \$1,188,049 | \$30,765 | \$2,596,880 | 1 |
| 6 | 2,800 | | | | | 658 | 465 | 15 | 173 | | 1,783 | 1,743 | 40 | 7,200 | 2 |
| 12 | 6,900 | | | 1 | 150 | 1,899 | 1,501 | 125 | 273 | | 12,912 | 12,245 | 667 | 38,285 | 3 |
| 5 | 2,795 | | | | | 1,098 | 876 | 37 | 185 | | 5,185 | 5,080 | 105 | 16,551 | 4 |
| 13 | 7,150 | | | 2 | 670 | 2,825 | 1,470 | 875 | 980 | | 35,180 | 33,800 | 1,380 | 56,700 | 5 |
| 42 | 21,500 | | | | | 1,431 | 175 | 340 | 916 | | 12,856 | 686 | 12,170 | 49,200 | 6 |
| 75 | 88,975 | | | | | 975 | 260 | 246 | 469 | | 80,200 | 80,165 | 35 | 153,600 | 7 |
| 49 | 30,396 | 5 | 1,500 | | | 5,214 | 189 | 854 | 4,710 | | 74,456 | 73,206 | 1,250 | 155,300 | 8 |
| 250 | 149,699 | | | | | 4,546 | | 519 | 4,027 | | 78,743 | 72,819 | 5,924 | 240,038 | 9 |
| 26 | 13,050 | | | | | 2,662 | 2,162 | 57 | 443 | | 18,908 | 18,627 | 281 | 49,920 | 10 |
| 5 | 2,200 | 5 | 850 | | | 5,070 | 120 | 145 | 4,805 | | 1,345 | 805 | 540 | 20,000 | 11 |
| | | 22 | 9,790 | | | 2,255 | 1,560 | 310 | 385 | | 25,620 | 25,425 | 95 | 50,885 | 12 |
| 10 | 8,850 | | | | | 7,009 | 852 | 257 | 5,900 | | 28,130 | 28,110 | 20 | 50,000 | 13 |
| 25 | 18,424 | | | | | 1,503 | 592 | 125 | 786 | | 11,855 | 11,725 | 130 | 37,500 | 14 |
| 2 | 1,200 | 1 | 150 | | | 1,965 | 1,160 | 25 | 780 | | 2,448 | 2,423 | 20 | 18,560 | 15 |
| 29 | 15,400 | | | | | 2,843 | 1,440 | 196 | 1,207 | | 54,480 | 54,345 | 135 | 100,000 | 16 |
| 10 | 4,674 | | | 1 | 180 | 1,226 | 531 | 62 | 3,984 | | 4,240 | 3,984 | 256 | 15,560 | 17 |
| 44 | 21,200 | 2 | 710 | 5 | 750 | 3,875 | 168 | 162 | 3,545 | | 16,344 | 15,384 | 960 | 88,810 | 18 |
| 10 | 5,460 | | | | | 1,185 | 715 | 155 | 205 | | 15,780 | 15,600 | 180 | 28,425 | 19 |
| 33 | 16,081 | | | 1 | 100 | 4,461 | 1,296 | 205 | 2,960 | | 26,167 | 25,685 | 482 | 78,860 | 20 |
| 30 | 14,770 | | | 8 | 1,245 | 9,413 | 1,975 | 113 | 7,325 | | 20,692 | 20,638 | 54 | 60,022 | 21 |
| 4 | 2,700 | | | | | 900 | 810 | 15 | 75 | | 1,567 | 1,557 | 10 | 8,230 | 22 |
| 351 | 199,546 | 86 | 14,865 | 6 | 675 | 97,883 | 8,472 | 4,301 | 85,110 | | 696,078 | 684,497 | 11,681 | 1,283,251 | 23 |

picture frames, 2; lumber, planing mill products, including sash, doors, and blinds, 2; malt, 1; masonry, brick and stone, 2; mineral and soda waters, 1; paper hanging, 1; patent medicines and compounds, 2; roofing and roofing materials, 1; rubber and elastic goods, 1; scales and balances, 1; soap and candles, 1; sugar and molasses, refining, 1; toys and games, 1; wirework, including wire rope and cable, 1.

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| | | | | | | | | | | | | | | | |
|-------|-------------|-----|-----------|-----|----------|-----------|----------|----------|-----------|----------|-------------|-------------|-----------|--------------|----|
| 3,330 | \$1,657,089 | 859 | \$212,605 | 159 | \$22,983 | \$855,397 | \$76,598 | \$44,681 | \$650,795 | \$33,383 | \$6,854,677 | \$6,665,896 | \$188,781 | \$11,573,670 | 1 |
| 10 | 4,800 | | | | | 1,685 | 1,140 | | 495 | 50 | 7,687 | 7,632 | 55 | 19,500 | 2 |
| 31 | 17,216 | | | | | 3,654 | 2,963 | 285 | 374 | 32 | 22,702 | 21,375 | 1,327 | 71,661 | 3 |
| 3 | 1,560 | 4 | 770 | 1 | 105 | 822 | 410 | 27 | 195 | 190 | 3,371 | 3,305 | 66 | 10,300 | 4 |
| 6 | 2,886 | | | 2 | 320 | 1,505 | 1,391 | 46 | 68 | | 6,088 | 5,878 | 165 | 18,558 | 5 |
| 33 | 42,092 | 64 | 16,590 | | | 22,189 | 3,581 | 705 | 17,908 | | 244,249 | 238,116 | 6,133 | 463,506 | 6 |
| 22 | 10,485 | | | 2 | 300 | 1,952 | 500 | 121 | 1,331 | | 4,505 | 189 | 4,316 | 19,416 | 7 |
| 22 | 10,000 | 7 | 1,276 | 16 | 2,553 | 2,180 | 972 | 53 | 1,155 | | 20,124 | 19,779 | 345 | 53,250 | 8 |
| 33 | 45,457 | 125 | 26,180 | 27 | 3,148 | 11,954 | 100 | 247 | 11,607 | | 19,844 | 18,116 | 1,728 | 117,459 | 9 |
| 190 | 102,987 | | | | | 64,642 | 1,210 | 286 | 2,390 | 60,656 | 209,881 | 208,457 | 1,874 | 433,229 | 10 |
| 17 | 5,408 | | | | | 1,029 | 529 | 43 | 457 | | 1,816 | 1,424 | 392 | 12,901 | 11 |
| 147 | 76,713 | | | 3 | 1,100 | 63,951 | 6,152 | 3,522 | 53,932 | 325 | 229,648 | 228,146 | 6,502 | 408,288 | 12 |
| 61 | 31,305 | 24 | 6,275 | | | 6,339 | 4,926 | 187 | 1,326 | 400 | 40,459 | 40,176 | 283 | 104,885 | 13 |
| 12 | 6,000 | 34 | 5,746 | | | 2,269 | 1,732 | 76 | 461 | | 5,249 | 5,110 | 139 | 85,905 | 14 |
| 5 | 2,200 | 2 | 450 | | | 1,885 | 1,450 | 23 | 412 | | 9,368 | 9,283 | 85 | 19,100 | 15 |
| 32 | 10,836 | | | | | 1,171 | 320 | 311 | 540 | | 20,722 | 20,492 | 230 | 36,902 | 16 |
| 18 | 7,115 | | | | | 1,040 | 750 | 110 | 180 | | 51,455 | 51,855 | 100 | 77,010 | 17 |
| 24 | 13,427 | | | | | 6,650 | 240 | 1,850 | 5,060 | | 283,872 | 277,884 | 5,988 | 327,793 | 18 |
| 436 | 196,793 | 6 | 960 | 52 | 7,233 | 45,865 | 1,477 | 3,000 | 40,848 | 540 | 597,610 | 578,421 | 19,189 | 1,038,837 | 19 |
| 12 | 8,070 | 2 | 500 | 1 | 156 | 2,208 | 1,675 | 70 | 463 | | 9,927 | 9,909 | 18 | 30,047 | 20 |
| 2 | 1,224 | | | | | 449 | 444 | | 5 | | 619 | 320 | 299 | 3,790 | 21 |
| 69 | 37,947 | | | 5 | 1,350 | 5,545 | 2,910 | 1,080 | 1,555 | | 105,172 | 108,992 | 1,180 | 170,750 | 22 |
| 188 | 75,615 | | | | | 8,900 | 50 | 200 | 2,790 | 5,860 | 129,777 | 129,777 | | 239,931 | 23 |
| 1 | 600 | 49 | 13,745 | 3 | 350 | 6,447 | 4,910 | 192 | 1,345 | | 53,320 | 53,230 | 90 | 92,900 | 24 |
| 28 | 12,550 | | | | | 2,219 | 1,988 | 300 | 531 | | 50,675 | 50,855 | 320 | 74,823 | 25 |
| 43 | 23,020 | | | 1 | 100 | 1,532 | 857 | 93 | 582 | | 13,805 | 13,790 | 15 | 53,805 | 26 |
| 33 | 17,500 | | | | | 2,132 | 1,895 | 87 | 150 | | 20,320 | 20,320 | | 50,850 | 27 |
| 8 | 5,189 | 6 | 2,936 | | | 2,624 | 2,380 | 20 | 224 | | 8,128 | 8,032 | 96 | 30,350 | 28 |
| 20 | 11,167 | | | | | 4,175 | | | | | 4,175 | 13,765 | 50 | 85,026 | 29 |
| 62 | 25,972 | | | 1 | 150 | 5,091 | 1,846 | 190 | 2,980 | | 72,226 | 72,073 | 153 | 125,628 | 30 |
| 71 | 35,707 | 15 | 3,439 | 1 | 230 | 11,654 | 2,607 | 730 | 7,817 | 500 | 40,683 | 39,116 | 1,567 | 133,573 | 31 |
| 88 | 56,782 | 4 | 2,025 | 5 | 604 | 21,783 | 3,240 | 556 | 13,287 | 4,700 | 28,898 | 25,646 | 3,252 | 157,745 | 32 |
| 39 | 13,810 | | | | | 4,019 | 1,611 | 356 | 2,022 | | 39,724 | 39,414 | 310 | 77,967 | 33 |
| 63 | 24,634 | | | | | 12,650 | 800 | 1,710 | 10,140 | | 543,484 | 540,284 | 3,200 | 675,810 | 34 |

TABLE 8.—MANUFACTURES IN CITIES

DAVENPORT—Continued.

| MANUFACTURING AND MECHANICAL INDUSTRIES. | Number of establishments. | CAPITAL. | | | | | Proprietors and firm members. | SALARIED OFFICIALS, CLERKS, ETC. | | AVERAGE NUMBER OF WAGE-EARNERS AND TOTAL WAGES. | |
|---|---------------------------|-----------|-----------|------------|-----------------------------------|--------------------|-------------------------------|----------------------------------|-----------|---|----------|
| | | Total. | Land. | Buildings. | Machinery, tools, and implements. | Cash and sundries. | | Number. | Salaries. | Total. | |
| | | | | | | | | | | Average number. | Wages. |
| 35 Tinsmithing, coppersmithing, and sheet-iron working. | 16 | \$44,111 | \$8,500 | \$9,880 | \$8,388 | \$17,343 | 21 | 4 | \$2,818 | 89 | \$21,541 |
| 86 Tobacco, cigars and cigarettes. | 32 | 805,595 | 4,870 | 8,055 | 16,065 | 276,805 | 87 | 87 | 58,850 | 389 | 142,891 |
| 87 Watch, clock, and jewelry repairing. | 11 | 8,910 | 1,000 | 8,000 | 2,460 | 2,460 | 12 | | | 10 | 5,520 |
| 88 All other industries ¹ | 58 | 7,545,020 | 1,659,691 | 1,788,626 | 1,969,388 | 2,132,420 | 45 | 199 | 202,503 | 1,529 | 681,997 |

¹ Embraces agricultural implements, 1; awnings, tents, and sails, 2; baking and yeast powders, 1; boots and shoes, factory product, 2; boxes, cigar, 2; boxes, fancy and paper, 2; boxes, wooden packing, 1; cars and general shop construction and repairs by steam railroad companies, 1; cars and general shop construction and repairs by street railroad companies, 1; clothing, men's, factory product, 2; coffee and spice, roasting and grinding, 2; cordage and twine, 1; dyeing and cleaning, 1; flavoring extracts, 1; food preparations, 1; fruits and vegetables, canning and preserving, 1; fur goods, 1; furniture, factory product, 1; gas and lamp fixtures, 1; gas, illuminating and heating, 1; glucose, 1; ice, artificial, 1; ironwork, architectural and ornamental, 1; jewelry, 1; liquors, malt, 2; looking-glass

DIES MOINES.

| | | | | | | | | | | | |
|--|-----|-------------|-----------|-----------|-------------|-------------|-----|-----|-----------|-------|-------------|
| 1 All industries | 494 | \$7,911,764 | \$568,677 | \$887,100 | \$2,318,422 | \$4,107,505 | 615 | 780 | \$596,750 | 4,557 | \$1,942,509 |
| 2 Bicycle and tricycle repairing | 10 | 11,775 | | | 4,875 | 7,400 | 12 | | | 24 | 9,518 |
| 3 Blacksmithing and wheelwrighting | 42 | 44,598 | 14,100 | 6,175 | 7,455 | 16,868 | 59 | 1 | 180 | 88 | 20,233 |
| 4 Boots and shoes, custom work and repairing. | 25 | 5,434 | 800 | 625 | 3,135 | 1,374 | 25 | | | 8 | 3,842 |
| 5 Bread and other bakery products | 17 | 130,473 | 29,500 | 37,250 | 32,125 | 31,598 | 20 | 26 | 16,213 | 90 | 41,985 |
| 6 Brick and tile | 14 | 503,401 | 62,140 | 194,892 | 117,481 | 128,888 | 10 | 21 | 21,440 | 256 | 106,349 |
| 7 Carpentering | 15 | 57,638 | 6,250 | 3,900 | 10,125 | 37,363 | 20 | 15 | 4,960 | 222 | 85,843 |
| 8 Carpets, rag | 3 | 8,760 | 600 | 900 | 1,150 | 1,110 | 4 | 1 | 750 | 28 | 8,760 |
| 9 Carriages and wagons | 6 | 208,281 | 11,500 | 16,000 | 12,582 | 168,199 | 2 | 20 | 18,688 | 129 | 57,724 |
| 10 Cars and general shop construction and repairs by steam railroad companies. | 8 | 70,700 | 31,000 | 20,700 | 18,000 | 6,000 | | 5 | 4,645 | 99 | 61,021 |
| 11 Clothing, men's, custom work and repairing. | 35 | 52,481 | 1,800 | 2,100 | 7,385 | 41,196 | 36 | 6 | 5,088 | 160 | 34,088 |
| 12 Clothing, women's, dressmaking | 5 | 2,800 | | | 1,750 | 1,050 | 6 | | | 30 | 8,200 |
| 13 Confectionery | 7 | 53,725 | 1,000 | 6,500 | 7,550 | 88,675 | 6 | 10 | 8,850 | 86 | 18,931 |
| 14 Druggists' preparations, not including prescriptions. | 3 | 16,200 | | | 2,000 | 14,200 | | 7 | 6,000 | 8 | 2,656 |
| 15 Dyeing and cleaning | 7 | 9,725 | 1,900 | 8,100 | 2,475 | 2,250 | 9 | 3 | 2,150 | 14 | 5,320 |
| 16 Flouring and grist mill products | 6 | 130,165 | 14,650 | 14,300 | 16,315 | 84,900 | 7 | 11 | 10,300 | 27 | 13,710 |
| 17 Food preparations | 3 | 2,500 | 100 | 200 | 750 | 1,450 | 3 | 1 | 180 | 2 | 890 |
| 18 Foundry and machine shop products | 12 | 376,600 | 31,630 | 80,350 | 132,750 | 131,870 | 15 | 84 | 29,932 | 184 | 97,918 |
| 19 Furniture, factory product | 3 | 161,810 | 10,000 | 15,000 | 16,450 | 120,360 | 1 | 11 | 12,565 | 137 | 47,448 |
| 20 Lock and gun smithing | 5 | 1,300 | | | 575 | 725 | 5 | | | 1 | 800 |
| 21 Lumber and timber products | 3 | 83,300 | 100 | 1,200 | 6,200 | 25,800 | 4 | 2 | 1,212 | 31 | 12,335 |
| 22 Lumber, planing mill products, including sash, doors, and blinds. | 4 | 122,110 | 18,500 | 21,000 | 19,500 | 68,110 | 2 | 5 | 4,952 | 99 | 49,818 |
| 23 Marble and stone work | 3 | 13,700 | 2,800 | 4,800 | 2,000 | 4,100 | 4 | | | 18 | 8,467 |
| 24 Masonry, brick and stone | 5 | 22,400 | 3,100 | 2,400 | 2,900 | 14,000 | 7 | 3 | 850 | 81 | 37,423 |
| 25 Millinery, custom work | 12 | 59,450 | 4,000 | 8,000 | 1,950 | 46,100 | 12 | 21 | 6,304 | 112 | 32,534 |
| 26 Monuments and tombstones | 5 | 106,279 | 8,000 | 6,000 | 4,225 | 98,051 | 2 | 5 | 3,244 | 21 | 12,079 |
| 27 Painting, house, sign, etc. | 13 | 34,060 | 1,500 | 1,500 | 4,385 | 28,725 | 17 | 15 | 9,821 | 98 | 45,545 |
| 28 Patent medicines and compounds | 8 | 415,327 | 18,266 | 1,000 | 21,490 | 374,671 | 11 | 82 | 57,631 | 109 | 31,836 |
| 29 Photography | 13 | 7,415 | 310 | 725 | 6,100 | 480 | 14 | | | 16 | 7,009 |
| 30 Plumbing, and gas and steam fitting | 15 | 53,963 | | 3,200 | 5,718 | 50,045 | 22 | | 5,926 | 126 | 70,384 |
| 31 Printing and publishing, book and job. | 22 | 318,060 | 15,000 | 15,000 | 181,656 | 101,404 | 19 | 40 | 36,164 | 357 | 155,160 |
| 32 Printing and publishing, newspapers and periodicals. | 22 | 421,350 | 18,000 | 40,500 | 187,450 | 175,400 | 19 | 133 | 105,499 | 279 | 135,502 |
| 33 Roofing and roofing materials | 3 | 8,700 | | 800 | 2,500 | 5,400 | 4 | 1 | 890 | 23 | 6,106 |
| 34 Saddlery and harness | 14 | 109,095 | | 25 | 9,395 | 99,675 | 14 | 24 | 8,570 | 91 | 30,823 |
| 35 Scales and balances | 4 | 62,742 | 2,000 | 3,000 | 13,800 | 43,942 | | 1 | 400 | 35 | 17,954 |
| 36 Tinsmithing, coppersmithing, and sheet-iron working. | 18 | 40,816 | 200 | 9,100 | 20,246 | 11,270 | 19 | 4 | 2,350 | 46 | 19,486 |
| 37 Tobacco, cigars and cigarettes | 14 | 114,896 | 7,500 | 3,800 | 3,665 | 100,031 | 14 | 16 | 13,300 | 146 | 67,330 |
| 38 Watch, clock, and jewelry repairing | 18 | 17,225 | 500 | 500 | 7,625 | 8,600 | 19 | | | 21 | 9,844 |
| 39 All other industries ¹ | 77 | 4,107,310 | 257,431 | 362,618 | 1,458,939 | 2,028,322 | 72 | 203 | 198,136 | 1,310 | 528,090 |

¹ Embraces agricultural implements, 1; artificial limbs, 1; awnings, tents, and sails, 1; axle grease, 1; baking and yeast powders, 1; bicycles and tricycles, 1; boxes, fancy and paper, 1; brass castings and brass finishing, 1; brassware, 1; brooms and brushes, 2; cars and general shop construction and repairs by street railroad companies, 1; cheese, butter, and condensed milk, factory product, 1; cleansing and polishing preparations, 1; clothing, men's, factory product, 2; coffee and spice, roasting and grinding, 1; cooperage, 2; electrical apparatus and supplies, 1; electrical construction and repairs, 1; electroplating, 1; flavoring extracts, 2; fur goods, 2; furnishing goods, men's, 2; furniture, cabinetmaking, repairing, and upholstering, 1; furs, dressed, 1; gas and lamp fixtures, 1; gas, illuminating and heating, 1; glass, cutting, staining, and ornamenting, 1; gloves and mittens, 1; hairwork, 1; hand stamps, 1; hats and caps, not including fur hats, and wool hats, 1;

DUBUQUE.

| | | | | | | | | | | | |
|---|-----|-------------|-----------|-------------|-------------|-------------|-----|-----|-----------|-------|-------------|
| 1 All industries | 460 | \$8,117,858 | \$855,053 | \$1,262,088 | \$1,231,064 | \$4,769,153 | 520 | 579 | \$455,806 | 5,508 | \$2,012,153 |
| 2 Awnings, tents, and sails | 3 | 7,335 | 2,500 | 50 | 560 | 4,225 | 3 | 1 | 624 | 3 | 875 |
| 3 Bicycle and tricycle repairing | 3 | 4,600 | | | 1,700 | 2,900 | 4 | | | 2 | 400 |
| 4 Blacksmithing and wheelwrighting | 12 | 15,346 | 5,338 | 1,200 | 2,175 | 6,835 | 17 | | | 13 | 7,985 |
| 5 Boots and shoes, custom work and repairing. | 26 | 11,049 | 2,750 | 2,750 | 2,960 | 2,589 | 29 | | | 11 | 5,065 |
| 6 Boots and shoes, factory product | 3 | 140,274 | | 7,000 | 27,702 | 105,572 | 4 | 18 | 13,334 | 150 | 46,141 |

BY SPECIFIED INDUSTRIES: 1900—Continued.

DAVENPORT—Continued.

| AVERAGE NUMBER OF WAGE-EARNERS AND TOTAL WAGES—continued. | | | | | | MISCELLANEOUS EXPENSES. | | | | | COST OF MATERIALS USED. | | | Value of products, including custom work and repairing. | |
|---|----------|---------------------------|--------|---------------------------|---------|-------------------------|----------------|--|---------------------------------|----------------|-------------------------|---|----------------------------------|---|----|
| Men, 16 years and over. | | Women, 16 years and over. | | Children, under 16 years. | | Total. | Rent of works. | Taxes, not including internal revenue. | Rent of offices, interest, etc. | Contract work. | Total. | Principal materials, including mill supplies and freight. | Fuel and rent of power and heat. | | |
| Average number. | Wages. | Average number. | Wages. | Average number. | Wages. | | | | | | | | | | |
| 88 | \$21,886 | 1 | \$155 | | | \$3,561 | \$1,823 | \$159 | \$1,579 | | \$39,187 | \$38,649 | \$598 | \$84,876 | 85 |
| 147 | 72,854 | 226 | 68,215 | 16 | \$1,822 | 90,697 | 4,526 | 1,720 | 84,451 | | 161,647 | 160,690 | 957 | 515,580 | 96 |
| 9 | 5,370 | | | 1 | 150 | 2,439 | 1,520 | 125 | 294 | \$500 | 6,455 | 6,100 | 355 | 22,895 | 87 |
| 1,217 | 615,402 | 290 | 63,343 | 22 | 8,252 | 426,090 | 12,273 | 26,671 | 881,766 | 5,880 | 3,738,325 | 3,610,361 | 127,964 | 5,753,788 | 98 |

and picture frames, 2; lumber and timber products, 2; malt, 1; mineral and soda waters, 2; mirrors, 1; musical instruments and materials, not specified, 1; paints, 1; paving and paving materials, 2; perfumery and cosmetics, 1; pickles, preserves, and sauces, 2; plumbers' supplies, 1; show cases, 1; slaughtering, wholesale, not including meat packing, 1; soap and candles, 1; tobacco, chewing, smoking, and snuff, 1; trunks and valises, 1; vinegar and cider, 1; washing machines and clothes wringers, 2; wood, turned and carved, 1; woolen goods, 1.

DIES MOINES.

| | | | | | | | | | | | | | | | |
|-------|-------------|-----|-----------|-----|----------|-----------|-----------|----------|-----------|-----------|-------------|-------------|-----------|--------------|----|
| 8,640 | \$1,727,094 | 817 | \$198,522 | 100 | \$16,893 | \$894,691 | \$138,185 | \$12,041 | \$612,354 | \$107,111 | \$4,075,568 | \$4,805,477 | \$170,091 | \$10,488,189 | 1 |
| 21 | 9,080 | | | 8 | 438 | 4,400 | 2,309 | 115 | 1,676 | 300 | 8,209 | 7,649 | 500 | 25,042 | 2 |
| 34 | 19,631 | | | 4 | 602 | 6,009 | 5,294 | 465 | 310 | | 26,509 | 24,548 | 1,901 | 98,780 | 3 |
| 8 | 3,842 | | | | | 2,839 | 2,629 | 49 | 41 | 120 | 8,903 | 8,788 | 115 | 26,595 | 4 |
| 61 | 35,142 | 23 | 4,463 | 6 | 2,330 | 9,868 | 4,376 | 1,204 | 4,288 | | 176,530 | 172,114 | 4,416 | 332,795 | 5 |
| 253 | 105,753 | 1 | 300 | 2 | 286 | 20,712 | 2,640 | 1,525 | 13,767 | 2,780 | 69,940 | 6,920 | 63,020 | 902,666 | 6 |
| 220 | 85,477 | | | 2 | 866 | 82,887 | 2,472 | 565 | 11,650 | 68,200 | 234,031 | 238,450 | 581 | 566,108 | 7 |
| 16 | 6,300 | 9 | 2,010 | 3 | 450 | 713 | 540 | 41 | 132 | | 2,835 | 2,615 | 220 | 15,400 | 8 |
| 121 | 55,366 | 8 | 2,353 | | | 20,795 | 4,185 | 1,126 | 15,484 | | 146,631 | 148,968 | 2,063 | 288,984 | 9 |
| 94 | 49,871 | | | 5 | 1,650 | 896 | | | 890 | | 49,617 | 48,727 | 920 | 106,209 | 10 |
| 110 | 68,912 | 47 | 14,664 | 8 | 512 | 23,611 | 11,829 | 420 | 6,495 | 5,367 | 121,429 | 120,490 | 939 | 292,772 | 11 |
| 2 | 1,600 | 28 | 6,600 | | | 1,524 | 1,332 | 12 | 180 | | 9,660 | 9,600 | 80 | 29,730 | 12 |
| 42 | 12,717 | 44 | 6,214 | | | 4,941 | 2,855 | 399 | 1,687 | | 59,555 | 57,629 | 1,926 | 111,850 | 13 |
| 5 | 1,980 | 3 | 676 | | | 6,922 | 470 | 35 | 6,417 | | 12,836 | 12,766 | 70 | 36,550 | 14 |
| 8 | 3,922 | 5 | 1,322 | 1 | 76 | 2,878 | 1,896 | 103 | 879 | | 2,687 | 2,327 | 360 | 20,720 | 15 |
| 26 | 13,210 | 1 | 500 | | | 7,776 | 420 | 751 | 6,005 | | 379,777 | 376,122 | 4,655 | 469,467 | 16 |
| 1 | 680 | 1 | 210 | | | 1,034 | 829 | 5 | 700 | | 1,870 | 1,855 | 15 | 5,400 | 17 |
| 183 | 97,743 | | | 1 | 175 | 18,316 | 2,226 | 2,863 | 13,027 | 200 | 244,954 | 238,859 | 6,095 | 439,372 | 18 |
| 98 | 44,546 | 9 | 2,897 | | | 24,078 | 5,192 | 861 | 18,025 | | 225,626 | 224,336 | 830 | 338,759 | 19 |
| 1 | 300 | | | | | 722 | 672 | 13 | 37 | | 1,749 | 1,630 | 69 | 4,305 | 20 |
| 31 | 12,335 | | | | | 540 | 210 | 45 | 285 | | 68,660 | 68,660 | | 109,925 | 21 |
| 99 | 49,818 | | | | | 2,719 | 950 | 660 | 1,109 | | 64,963 | 63,241 | 1,712 | 144,171 | 22 |
| 13 | 8,467 | | | | | 400 | 5 | 175 | 220 | | 9,419 | 9,239 | 180 | 26,745 | 23 |
| 51 | 37,423 | | | | | 5,058 | 276 | 155 | 722 | 3,900 | 57,036 | 57,036 | | 117,500 | 24 |
| | | 112 | 32,534 | | | 11,107 | 5,969 | 903 | 4,235 | | 95,442 | 95,287 | 155 | 199,612 | 25 |
| 21 | 12,079 | | | | | 8,405 | 2,496 | 572 | 5,397 | | 25,935 | 25,864 | 621 | 81,459 | 26 |
| 97 | 45,445 | | | 1 | 100 | 7,312 | 4,335 | 258 | 3,219 | | 41,009 | 41,019 | 80 | 129,290 | 27 |
| 48 | 17,776 | 66 | 14,110 | | | 159,831 | 2,622 | 452 | 156,717 | | 132,287 | 130,656 | 1,631 | 652,444 | 28 |
| 9 | 4,382 | 7 | 2,627 | | | 4,712 | 3,211 | 86 | 1,312 | 103 | 12,341 | 12,270 | 71 | 41,000 | 29 |
| 124 | 69,868 | 2 | 516 | | | 7,678 | 4,452 | 338 | 2,808 | | 95,120 | 95,218 | 911 | 250,216 | 30 |
| 296 | 133,527 | 56 | 20,958 | 5 | 675 | 27,616 | 11,826 | 1,905 | 13,344 | 381 | 170,413 | 164,748 | 5,665 | 463,984 | 31 |
| 231 | 124,965 | 25 | 6,278 | 23 | 4,259 | 91,311 | 9,103 | 2,463 | 66,463 | 13,277 | 158,942 | 152,700 | 6,242 | 600,130 | 32 |
| 22 | 5,950 | 1 | 156 | | | 1,596 | 625 | 21 | 950 | | 14,079 | 14,050 | 20 | 31,515 | 33 |
| 91 | 30,826 | | | | | 7,154 | 5,122 | 395 | 1,112 | | 129,962 | 129,307 | 655 | 199,000 | 34 |
| 35 | 17,954 | | | | | 3,955 | 1,615 | 482 | 1,258 | | 20,058 | 18,884 | 1,174 | 51,964 | 35 |
| 46 | 19,330 | 1 | 156 | | | 3,924 | 2,572 | 211 | 1,141 | | 51,104 | 50,517 | 587 | 140,059 | 36 |
| 111 | 57,811 | 26 | 8,225 | 9 | 1,944 | 28,936 | 4,084 | 998 | 23,304 | | 57,829 | 57,522 | 301 | 190,247 | 37 |
| 18 | 9,580 | | | 3 | 264 | 5,116 | 3,456 | 328 | 462 | | 8,719 | 8,519 | 200 | 43,752 | 38 |
| 969 | 453,986 | 342 | 70,638 | 29 | 3,416 | 277,155 | 19,020 | 20,987 | 226,060 | 11,088 | 1,978,342 | 1,917,931 | 60,411 | 3,412,072 | 39 |

hosiery and knit goods, 2; ice, artificial, 1; ironwork, architectural and ornamental, 2; looking-glass and picture frames, 1; mineral and soda waters, 2; models and patterns, 1; oil, linseed, 1; oysters, canning and preserving, 1; paper hanging, 1; paper hangings, 1; perfumery and cosmetics, 2; pickles, preserves, and sauces, 1; plastering and stucco work, 1; pottery, terra cotta, and fire-clay products, 1; sewing machine repairing, 1; shirts, 1; show cases, 2; slaughtering, wholesale, not including meat packing, 2; soap and candles, 2; starch, 1; steam fittings and heating apparatus, 2; stereotyping and electrotyping, 2; surgical appliances, 1; trunks and valises, 2; typewriters and supplies, 1; windmills, 2; wirework, including wire rope and cable, 2; woolen goods, 1.

DUBUQUE.

| | | | | | | | | | | | | | | | |
|-------|-------------|-------|-----------|-----|----------|-------------|----------|----------|-----------|-----------|-------------|-------------|----------|--------------|---|
| 4,242 | \$1,785,760 | 1,150 | \$208,829 | 111 | \$17,564 | \$1,028,245 | \$86,627 | \$53,043 | \$775,227 | \$113,848 | \$5,980,017 | \$5,836,084 | \$93,933 | \$10,952,204 | 1 |
| 2 | 600 | 1 | 275 | | | 1,053 | 230 | 62 | 761 | | 4,162 | 4,162 | | 14,300 | 2 |
| 2 | 400 | | | | | 774 | 600 | 24 | 160 | | 3,165 | 2,990 | 175 | 6,746 | 3 |
| 13 | 7,985 | | | | | 1,649 | 1,358 | 105 | 186 | | 8,568 | 7,998 | 570 | 31,437 | 4 |
| 11 | 5,065 | | | | | 1,392 | 1,268 | 35 | 89 | | 8,724 | 8,589 | 135 | 24,458 | 5 |
| 83 | 31,336 | 62 | 11,438 | 14 | 3,367 | 7,762 | 1,610 | 664 | 5,488 | | 120,200 | 118,919 | 1,281 | 208,034 | 6 |

TABLE 8.—MANUFACTURES IN CITIES

DUBUQUE—Continued.

| MANUFACTURING AND MECHANICAL INDUSTRIES. | Number of establishments. | CAPITAL. | | | | | Proprietors and firm members. | SALARIED OFFICIALS, CLERKS, ETC. | | AVERAGE NUMBER OF WAGE-EARNERS AND TOTAL WAGES. | |
|---|---------------------------|-----------|----------|------------|-----------------------------------|--------------------|-------------------------------|----------------------------------|-----------|---|----------|
| | | Total. | Land. | Buildings. | Machinery, tools, and implements. | Cash and sundries. | | Number. | Salaries. | Total. | |
| | | | | | | | | | | Average number. | Wages. |
| Bread and other bakery products..... | 13 | \$149,002 | \$17,200 | \$19,800 | \$72,513 | \$38,489 | 13 | 21 | \$15,093 | 72 | \$28,977 |
| Brick and tile..... | 6 | 51,831 | 23,815 | 8,800 | 6,856 | 12,360 | 8 | | | 41 | 19,507 |
| Carpentering..... | 46 | 48,289 | 8,310 | 6,552 | 7,038 | 26,889 | 65 | 1 | 720 | 167 | 81,970 |
| Carpets, rag..... | 3 | 1,318 | | | 750 | 668 | 4 | | | 5 | 1,430 |
| Carriages and wagons..... | 8 | 711,725 | 94,700 | 53,100 | 9,825 | 554,100 | 13 | 46 | 13,900 | 861 | 107,376 |
| Clothing, men's, custom work and repairing..... | 20 | 43,391 | 2,000 | 2,000 | 2,520 | 36,871 | 26 | 2 | 3,000 | 72 | 28,489 |
| Clothing, men's, factory product..... | 4 | 267,964 | | | 30,245 | 237,719 | 2 | 91 | 59,230 | 683 | 199,346 |
| Clothing, women's, dressmaking..... | 29 | 6,732 | 30 | 300 | 2,054 | 4,348 | 32 | | | 108 | 15,555 |
| Confectionery..... | 5 | 80,420 | 10,000 | 10,000 | 18,300 | 42,120 | 5 | 15 | 17,176 | 69 | 15,940 |
| Cooperage..... | 6 | 26,895 | 4,100 | 5,500 | 8,595 | 8,200 | 4 | 1 | 1,200 | 36 | 13,978 |
| Foundry and machine shop products..... | 9 | 312,188 | 80,000 | 47,582 | 87,881 | 146,725 | 6 | 22 | 15,570 | 144 | 62,858 |
| Furniture, cabinetmaking, repairing, and upholstering..... | 5 | 6,675 | | | 375 | 6,300 | 7 | | | 6 | 2,681 |
| Furniture, factory product..... | 4 | 105,501 | 18,075 | 24,437 | 20,602 | 42,387 | 1 | 10 | 6,770 | 130 | 43,543 |
| Liquors, malt..... | 3 | 951,710 | 48,000 | 454,000 | 100,000 | 310,710 | 1 | 21 | 88,800 | 121 | 62,000 |
| Lock and gun smithing..... | 3 | 2,025 | 500 | 500 | 600 | 425 | 3 | | | 1 | 500 |
| Looking-glass and picture frames..... | 5 | 4,395 | | | 570 | 8,825 | 4 | 1 | 250 | 7 | 2,000 |
| Lumber and timber products..... | 3 | 1,136,084 | 267,348 | 20,500 | 45,907 | 802,329 | 29 | 29 | 31,768 | 302 | 106,146 |
| Lumber, planing mill products, including sash, doors, and blinds..... | 7 | 1,324,323 | 81,000 | 122,007 | 98,722 | 1,022,594 | 8 | 55 | 59,890 | 720 | 287,516 |
| Marble and stone work..... | 4 | 10,250 | | 500 | 5,550 | 4,200 | 7 | | | 12 | 11,794 |
| Masonry, brick and stone..... | 27 | 18,607 | 840 | 25 | 6,594 | 11,148 | 38 | | | 113 | 50,017 |
| Millinery, custom work..... | 11 | 26,045 | 3,000 | 5,500 | 520 | 17,025 | 14 | | | 36 | 6,434 |
| Mineral and soda waters..... | 3 | 8,700 | 1,600 | 1,700 | 3,300 | 2,100 | 4 | 1 | 468 | 7 | 3,520 |
| Monuments and tombstones..... | 3 | 18,215 | 1,500 | 500 | 637 | 16,578 | 4 | 2 | 2,100 | 7 | 3,783 |
| Painting, house, sign, etc..... | 30 | 18,708 | 400 | 515 | 5,235 | 12,528 | 33 | 2 | 620 | 106 | 41,618 |
| Paving and paving materials..... | 4 | 3,725 | | | 1,300 | 2,425 | 8 | | | 21 | 10,161 |
| Photography..... | 5 | 10,000 | | | 8,050 | 2,040 | 5 | | | 7 | 2,425 |
| Plastering and stucco work..... | 9 | 2,190 | | | 750 | 1,440 | 9 | | | 20 | 9,204 |
| Plumbing, and gas and steam fitting..... | 13 | 56,315 | 5,000 | 1,000 | 4,300 | 46,015 | 19 | 5 | 1,684 | 54 | 33,020 |
| Printing and publishing, book and job..... | 5 | 44,833 | 3,000 | 7,000 | 21,300 | 12,988 | 6 | 6 | 3,280 | 46 | 21,906 |
| Printing and publishing, newspapers and periodicals..... | 9 | 97,489 | 800 | 2,200 | 60,187 | 34,252 | 8 | 50 | 27,894 | 108 | 64,316 |
| Roofing and roofing materials..... | 3 | 10,150 | | | 1,950 | 8,200 | 3 | 2 | 1,200 | 34 | 7,600 |
| Saddlery and harness..... | 9 | 71,242 | 12,500 | 10,500 | 9,390 | 38,852 | 12 | 8 | 3,124 | 51 | 14,864 |
| Sausage..... | 4 | 13,300 | 5,000 | 6,000 | 2,600 | 4,100 | 6 | | | 13 | 6,500 |
| Slaughtering and meat packing, wholesale..... | 4 | 139,200 | 21,000 | 61,200 | 13,000 | 44,000 | 2 | 7 | 5,170 | 61 | 22,790 |
| Tinsmithing, coppersmithing, and sheet-iron working..... | 11 | 63,570 | 3,300 | 3,900 | 10,245 | 36,125 | 16 | | | 40 | 19,687 |
| Tobacco, cigars and cigarettes..... | 15 | 85,607 | 3,400 | 3,800 | 8,825 | 74,582 | 18 | 4 | 3,048 | 149 | 30,772 |
| Watch, clock, and jewelry repairing..... | 9 | 16,225 | 3,250 | 1,550 | 6,250 | 5,175 | 9 | 2 | 675 | 15 | 7,565 |
| Window shades..... | 3 | 3,150 | 500 | 500 | 250 | 1,900 | 2 | | | 2 | 1,024 |
| All other industries ¹ | 53 | 1,992,175 | 169,299 | 364,020 | 507,751 | 951,105 | 54 | 151 | 123,718 | 1,368 | 563,464 |

¹ Embraces bookbinding and blank book making, 1; bottling, 2; boxes, cigar, 1; boxes, fancy and paper, 2; boxes, wooden packing, 1; brass castings and brass finishing, 1; brooms and brushes, 2; buttons, 1; carriage and wagon materials, 2; cars and general shop construction and repairs by steam railroad companies, 2; coffee and spice, roasting and grinding, 2; coffins, burial cases, and undertakers' goods, 2; dentists' materials, 2; dyeing and cleaning, 2; flouring and grist mill products, 1; fur goods, 2; furs, dressed, 1; gas, illuminating and heating, 1; glass, cutting, staining, and ornamenting, 1; gloves and mittens, 1; hairwork, 1; hand

SIoux CITY.

| | | | | | | | | | | | | |
|----|--|-----|-------------|-----------|-------------|-------------|-------------|-----|-----|-----------|-------|-------------|
| 1 | All industries..... | 329 | \$5,691,644 | \$502,823 | \$1,108,779 | \$1,416,046 | \$2,664,496 | 376 | 322 | \$295,157 | 3,104 | \$1,485,066 |
| 2 | Awnings, tents, and sails..... | 3 | 14,285 | 5,000 | 2,500 | 1,685 | 5,100 | 3 | 2 | 2,845 | 7 | 1,822 |
| 3 | Blacksmithing and wheelwrighting..... | 20 | 18,015 | 4,965 | 2,505 | 3,760 | 6,785 | 22 | | | 18 | 6,954 |
| 4 | Boots and shoes, custom work and repairing..... | 14 | 5,533 | | 656 | 2,675 | 2,202 | 18 | | | 7 | 3,983 |
| 5 | Bread and other bakery products..... | 8 | 270,757 | 8,000 | 4,000 | 181,145 | 77,612 | 8 | 20 | 26,061 | 127 | 46,424 |
| 6 | Brick and tile..... | 6 | 377,252 | 175,886 | 109,690 | 41,082 | 50,594 | 4 | 9 | 7,950 | 83 | 46,846 |
| 7 | Carpentering..... | 15 | 20,920 | 8,650 | 3,475 | 8,800 | 4,995 | 19 | | | 81 | 46,847 |
| 8 | Carriages and wagons..... | 10 | 71,064 | 40,000 | 14,600 | 4,939 | 11,525 | 17 | | | 33 | 19,310 |
| 9 | Clothing, men's, custom work and repairing..... | 20 | 44,587 | | | 5,458 | 39,129 | 27 | 3 | 2,320 | 81 | 43,891 |
| 10 | Clothing, women's, dressmaking..... | 20 | 10,969 | 500 | 1,500 | 3,230 | 5,739 | 24 | | | 65 | 12,653 |
| 11 | Confectionery..... | 5 | 45,892 | 8,000 | 16,000 | 4,327 | 17,565 | 5 | 3 | 1,370 | 55 | 16,211 |
| 12 | Electrical construction and repairs..... | 3 | 19,070 | | | 2,800 | 16,870 | 1 | 3 | 2,550 | 9 | 5,510 |
| 13 | Flouring and grist mill products..... | 5 | 220,979 | 13,200 | 35,600 | 59,600 | 113,579 | 6 | 16 | 15,328 | 53 | 21,053 |
| 14 | Foundry and machine shop products..... | 10 | 59,395 | 250 | 1,996 | 22,495 | 35,064 | 11 | 13 | 10,616 | 105 | 42,478 |
| 15 | Furniture, cabinetmaking, repairing, and upholstering..... | 4 | 12,375 | 7,000 | 3,000 | 600 | 2,275 | 7 | | | 6 | 3,294 |
| 16 | Grease and tallow..... | 3 | 12,447 | 2,750 | 3,950 | 2,800 | 2,947 | 4 | 5 | 1,530 | 7 | 2,504 |
| 17 | Ironwork, architectural and ornamental..... | 3 | 11,267 | | 500 | 4,200 | 6,567 | 4 | 1 | 720 | 22 | 9,188 |
| 18 | Lock and gun smithing..... | 4 | 4,750 | | | 3,000 | 1,750 | 5 | | | 7 | 3,700 |
| 19 | Looking-glass and picture frames..... | 3 | 3,540 | | | 1,140 | 2,400 | 3 | 4 | 2,340 | 11 | 4,668 |
| 20 | Masonry, brick and stone..... | 6 | 23,305 | 1,000 | 1,610 | 6,445 | 14,250 | 9 | 2 | 352 | 49 | 24,361 |
| 21 | Millinery, custom work..... | 9 | 32,100 | 5,000 | 4,000 | 3,855 | 19,745 | 13 | 8 | 2,685 | 42 | 11,465 |

BY SPECIFIED INDUSTRIES: 1900—Continued.

DUBUQUE—Continued.

| AVERAGE NUMBER OF WAGE-EARNERS AND TOTAL WAGES—Continued. | | | | | | MISCELLANEOUS EXPENSES. | | | | | COST OF MATERIALS USED. | | | Value of products, including custom work and repairing. | |
|---|----------|---------------------------|---------|---------------------------|--------|-------------------------|----------------|--|---------------------------------|----------------|-------------------------|---|----------------------------------|---|----|
| Men, 16 years and over. | | Women, 16 years and over. | | Children, under 16 years. | | Total. | Rent of works. | Taxes, not including internal revenue. | Rent of offices, interest, etc. | Contract work. | Total. | Principal materials, including mill supplies and freight. | Fuel and rent of power and heat. | | |
| Average number. | Wages. | Average number. | Wages. | Average number. | Wages. | | | | | | | | | | |
| 50 | \$24,928 | 17 | \$3,143 | 5 | \$306 | \$8,476 | \$4,376 | \$1,119 | \$2,981 | | \$106,670 | \$108,365 | \$3,305 | \$223,017 | 7 |
| 41 | 19,507 | | | | | 2,701 | 250 | 1,775 | 676 | | 6,675 | 165 | 6,510 | 83,125 | 8 |
| 167 | 81,970 | | | | | 63,193 | 1,060 | 284 | 952 | \$60,897 | 197,802 | 197,717 | 85 | 891,045 | 9 |
| 3 | 1,050 | 2 | 400 | | | 280 | 252 | | 28 | | 709 | 567 | 142 | 5,648 | 10 |
| 361 | 107,876 | | | | | 46,935 | 480 | 9,008 | 87,352 | 100 | 276,718 | 271,970 | 4,748 | 636,963 | 11 |
| 60 | 25,491 | 12 | 2,948 | | | 6,846 | 5,980 | 218 | 639 | | 40,458 | 39,887 | 571 | 108,458 | 12 |
| 48 | 17,750 | 630 | 120,596 | 10 | 1,000 | 74,984 | 6,870 | 3,750 | 64,364 | | 390,188 | 387,258 | 2,980 | 700,199 | 13 |
| 26 | 8,975 | 108 | 15,555 | | | 1,602 | 1,512 | | 89 | | 9,928 | 9,700 | 228 | 41,678 | 14 |
| 86 | 13,678 | 42 | 6,625 | 1 | 210 | 3,708 | 785 | 513 | 2,410 | | 108,242 | 106,627 | 1,615 | 154,575 | 15 |
| | | | | | | 1,283 | 76 | 125 | 1,082 | | 31,789 | 31,389 | 400 | 57,958 | 16 |
| 141 | 62,441 | | | 3 | 417 | 14,068 | 2,464 | 2,222 | 9,382 | | 114,538 | 108,167 | 6,371 | 244,774 | 17 |
| 6 | 2,584 | | | | | 541 | 476 | 25 | 40 | | 4,800 | 4,665 | 135 | 10,910 | 18 |
| 124 | 42,644 | | | 6 | 899 | 4,630 | 24 | 947 | 3,659 | | 39,674 | 38,260 | 1,414 | 99,538 | 19 |
| 121 | 62,000 | | | | | 337,000 | 18,550 | 5,600 | 317,950 | | 127,150 | 111,538 | 15,612 | 632,320 | 20 |
| 1 | 500 | | | | | 352 | 178 | 100 | 76 | | 587 | 527 | 60 | 2,707 | 21 |
| 7 | 2,000 | | | | | 947 | 653 | 24 | 270 | | 8,450 | 8,295 | 155 | 14,585 | 22 |
| 300 | 105,600 | | | 2 | 515 | 42,566 | 3,720 | 6,866 | 31,980 | | 1,004,189 | 1,004,189 | | 1,295,324 | 23 |
| 700 | 284,384 | | | 20 | 3,132 | 76,115 | 4,940 | 7,082 | 64,093 | | 1,153,061 | 1,151,333 | 2,828 | 1,729,301 | 24 |
| 12 | 11,734 | | | | | 486 | 84 | 5 | 397 | | 20,983 | 20,743 | 240 | 48,740 | 25 |
| 113 | 50,017 | | | | | 2,543 | 626 | 19 | 1,838 | | 62,031 | 62,003 | 28 | 138,765 | 26 |
| | | 36 | 6,434 | | | 8,978 | 3,091 | 142 | 740 | | 31,099 | 31,010 | 89 | 54,601 | 27 |
| 7 | 3,520 | | | | | 605 | 240 | 115 | 250 | | 5,647 | 5,347 | 300 | 19,527 | 28 |
| 7 | 3,783 | | | | | 751 | 501 | 55 | 192 | | 13,285 | 13,280 | 55 | 23,046 | 29 |
| 106 | 41,613 | | | | | 3,600 | 1,993 | 44 | 1,468 | 100 | 30,862 | 30,737 | 125 | 93,414 | 30 |
| 21 | 10,164 | | | | | 304 | 178 | | 131 | | 11,651 | 11,651 | | 27,660 | 31 |
| 1 | 550 | 6 | 1,875 | | | 2,217 | 1,330 | 37 | 850 | | 5,524 | 5,524 | | 16,375 | 32 |
| 20 | 9,204 | | | | | 582 | 214 | 1 | 57 | 310 | 6,743 | 6,723 | 20 | 20,259 | 33 |
| 54 | 33,020 | | | | | 6,812 | 2,181 | 223 | 4,405 | | 57,987 | 57,895 | 592 | 115,872 | 34 |
| 36 | 19,286 | 6 | 2,007 | 4 | 613 | 3,606 | 1,570 | 441 | 1,595 | | 22,127 | 20,812 | 1,815 | 70,985 | 35 |
| 97 | 61,866 | 10 | 2,168 | 1 | 282 | 25,500 | 3,214 | 625 | 18,225 | 3,436 | 50,487 | 46,143 | 4,344 | 223,409 | 36 |
| 34 | 7,600 | | | | | 753 | 390 | 45 | 313 | | 20,780 | 20,625 | 155 | 48,050 | 37 |
| 48 | 13,864 | 3 | 500 | | | 5,544 | 1,461 | 508 | 1,502 | 2,070 | 57,873 | 57,313 | 555 | 108,222 | 38 |
| 13 | 6,500 | | | | | 1,000 | 600 | 255 | 85 | | 47,885 | 47,480 | 405 | 87,800 | 39 |
| 61 | 22,790 | | | | | 2,817 | 180 | 1,082 | 1,555 | | 378,710 | 376,111 | 2,599 | 470,046 | 40 |
| 39 | 19,537 | | | 1 | 150 | 4,110 | 1,204 | 539 | 2,367 | | 70,217 | 68,890 | 1,327 | 125,018 | 41 |
| 22 | 11,757 | 117 | 17,995 | 10 | 1,020 | 21,614 | 2,210 | 519 | 18,885 | | 57,935 | 57,804 | 131 | 129,836 | 42 |
| 15 | 7,565 | | | | | 962 | 775 | 116 | 71 | | 6,170 | 6,053 | 112 | 21,252 | 43 |
| 2 | 1,024 | | | | | 235 | 105 | 30 | 100 | | 3,515 | 3,515 | | 6,200 | 44 |
| 1,236 | 541,602 | 98 | 16,870 | 34 | 4,992 | 241,874 | 11,696 | 7,799 | 175,444 | 46,435 | 1,201,479 | 1,168,708 | 32,771 | 2,458,401 | 45 |

stamps, 1; hardware, 2; ironwork, architectural and ornamental, 2; lead, smelting and refining, 1; lime and cement, 2; mattresses and spring beds, 1; models and patterns, 1; oil, linseed, 1; sewing machine repairing, 1; shipbuilding, iron and steel, 1; ship and boat building, wooden, 2; slaughtering, wholesale, not including meat packing, 1; soap and candles, 1; tobacco, chewing, smoking, and snuff, 1; trunks and valises, 1; vinegar and cider, 1; wirework, including wire rope and cable, 2.

SIoux CITY.

| | | | | | | | | | | | | | | | |
|-------|-------------|-----|----------|----|---------|-----------|----------|----------|-----------|----------|--------------|--------------|-----------|--------------|----|
| 2,610 | \$1,380,013 | 438 | \$95,925 | 56 | \$9,128 | \$664,486 | \$78,239 | \$25,611 | \$550,221 | \$15,415 | \$10,609,672 | \$10,489,555 | \$180,117 | \$15,469,702 | 1 |
| 3 | 775 | 4 | 1,047 | | | 1,499 | 221 | 127 | 1,151 | | 6,265 | 6,150 | 115 | 15,425 | 2 |
| 13 | 6,954 | | | | | 1,847 | 1,014 | 178 | 655 | | 11,996 | 11,195 | 801 | 39,868 | 3 |
| 7 | 3,983 | | | | | 1,752 | 1,347 | 8 | 402 | | 6,974 | 6,949 | 25 | 19,395 | 4 |
| 72 | 36,218 | 54 | 10,022 | 1 | 184 | 22,598 | 6,881 | 1,765 | 13,952 | | 234,226 | 229,150 | 5,076 | 393,013 | 5 |
| 82 | 46,146 | | | 1 | 200 | 14,977 | 500 | 600 | 13,811 | | 33,324 | 32,488 | 82,841 | 111,350 | 6 |
| 81 | 46,847 | | | | | 12,947 | 772 | 222 | 849 | 11,104 | 104,887 | 104,887 | | 186,842 | 7 |
| 33 | 19,310 | | | | | 3,415 | 952 | 711 | 1,752 | | 22,098 | 21,066 | 1,032 | 58,268 | 8 |
| 73 | 41,281 | 6 | 2,246 | 2 | 364 | 10,318 | 5,944 | 205 | 4,669 | | 48,141 | 47,990 | 151 | 132,639 | 9 |
| | | 65 | 12,653 | | | 3,492 | 2,875 | | 617 | | 15,891 | 15,311 | 80 | 48,324 | 10 |
| 24 | 10,975 | 30 | 5,080 | 1 | 156 | 3,166 | 2,120 | 183 | 803 | | 80,195 | 79,404 | 791 | 138,553 | 11 |
| 9 | 5,510 | | | | | 1,993 | 1,152 | | 841 | | 12,290 | 11,913 | 383 | 24,183 | 12 |
| 53 | 21,053 | | | | | 17,094 | 120 | 1,073 | 15,901 | | 641,713 | 631,037 | 10,676 | 752,203 | 13 |
| 105 | 42,478 | | | | | 9,884 | 4,484 | 199 | 5,041 | 160 | 60,215 | 58,202 | 4,013 | 153,475 | 14 |
| 6 | 3,284 | | | | | 770 | 367 | 13 | 390 | | 5,408 | 5,408 | | 12,406 | 15 |
| 7 | 2,504 | | | | | 1,074 | 50 | 64 | 960 | | 49,156 | 48,085 | 1,121 | 56,446 | 16 |
| 20 | 9,038 | | | 2 | 150 | 1,890 | 548 | 80 | 885 | 377 | 8,635 | 8,137 | 498 | 27,430 | 17 |
| 7 | 3,700 | | | | | 1,595 | 1,092 | 30 | 478 | | 3,580 | 3,515 | 65 | 11,445 | 18 |
| 9 | 4,064 | 2 | 604 | | | 2,490 | 636 | | 554 | 1,300 | 9,553 | 9,553 | | 23,430 | 19 |
| 49 | 21,364 | | | | | 1,911 | 346 | 37 | 1,528 | | 38,631 | 38,631 | | 75,304 | 20 |
| | | 42 | 11,465 | | | 9,914 | 3,625 | 182 | 6,107 | | 46,558 | 46,548 | 10 | 99,283 | 21 |

TABLE 8.—MANUFACTURES IN CITIES

SIoux CITY—Continued.

| MANUFACTURING AND MECHANICAL INDUSTRIES, AND UTILITIES. | Number of establishments. | CAPITAL. | | | | | Proprietors and firm members. | SALARIED OFFICIALS, CLERKS, ETC. | | AVERAGE NUMBER OF WAGE-EARNERS AND TOTAL WAGES. | |
|---|---------------------------|-----------|---------|------------|-----------------------------------|--------------------|-------------------------------|----------------------------------|-----------|---|--------|
| | | Total. | Land. | Buildings. | Machinery, tools, and implements. | Cash and sundries. | | Number. | Salaries. | Total. | |
| | | | | | | | | | | Average number. | Wages. |
| 22 Mineral and soda waters..... | 3 | \$36,919 | \$2,200 | \$3,950 | \$5,020 | \$25,749 | 2 | \$4,200 | 10 | \$1,065 | |
| 23 Painting, house, sign, etc..... | 13 | 10,988 | | 550 | 2,395 | 8,048 | 18 | 46 | 30 | 17,403 | |
| 24 Paper hanging..... | 5 | 35,050 | 6,000 | 4,000 | 1,100 | 23,950 | 7 | 1,648 | 29 | 18,709 | |
| 25 Paving and paving materials..... | 8 | 45,897 | | 857 | 11,500 | 33,540 | 4 | 900 | 22 | 14,421 | |
| 26 Photography..... | 8 | 13,575 | | | 8,900 | 4,675 | 8 | 1,145 | 10 | 6,181 | |
| 27 Plumbing, and gas and steam fitting..... | 8 | 38,288 | | 150 | 5,350 | 32,788 | 9 | 3,533 | 50 | 26,047 | |
| 28 Printing and publishing, book and job..... | 9 | 179,421 | | 36,264 | 55,602 | 87,555 | 10 | 12,420 | 73 | 28,143 | |
| 29 Printing and publishing, newspapers and periodicals..... | 13 | 263,447 | 42,022 | 19,448 | 106,180 | 95,797 | 11 | 28,938 | 182 | 109,894 | |
| 30 Roofing and roofing materials..... | 3 | 8,475 | | 300 | 546 | 7,629 | 2 | 720 | 9 | 5,088 | |
| 31 Saddlery and harness..... | 8 | 117,948 | | 1,000 | 8,432 | 108,516 | 9 | 7,332 | 36 | 16,711 | |
| 32 Tinsmithing, coppersmithing, and sheet-iron working..... | 8 | 8,345 | | | 4,375 | 3,970 | 7 | 600 | 23 | 13,618 | |
| 33 Tobacco, cigars and cigarettes..... | 12 | 76,721 | 300 | | 1,752 | 74,669 | 20 | 3,420 | 93 | 50,010 | |
| 34 Watch, clock, and jewelry repairing..... | 12 | 14,315 | | | 8,075 | 6,240 | 12 | | 21 | 12,419 | |
| 35 All other industries ¹ | 53 | 3,562,243 | 177,600 | 836,678 | 838,283 | 1,715,682 | 47 | 153,538 | 1,648 | 789,762 | |

¹ Embraces agricultural implements, 1; baking and yeast powders, 1; bicycle and tricycle repairing, 2; bottling, 2; boxes, cigar, 1; boxes, fancy and paper, 1; bridges, 1; brooms and brushes, 1; butter, reworking, 1; carriage and wagon materials, 1; cars and general shop construction and repairs by steam railroad companies, 2; cheese, butter, and condensed milk, factory product, 1; clothing, men's, factory product, 1; coffee and spice, roasting and grinding, 1; cooperage, 1; dyeing and cleaning, 1; fancy articles, not elsewhere specified, 1; food preparations, 1; fur goods, 2; furs, dressed, 1; gas, illuminating and heating, 1; hairwork, 2; ice, artificial, 1; liquors, malt, 1; lumber, planing mill products, including sash, doors, and blinds, 2; marble and stone work, 1; mattresses and spring beds, 1;

TABLE 9.—MANUFACTURES IN CITIES

| 1 Total for cities..... | 2,706 | \$27,311,080 | \$3,058,481 | \$5,001,403 | \$6,288,329 | \$12,962,867 | 3,078 | 1,626 | \$1,435,808 | 16,998 | \$7,029,332 | |
|-------------------------|-------|--------------|-------------|-------------|-------------|--------------|-------|-------|-------------|--------|-------------|--|
| 2 Belle Plaine..... | 41 | 89,742 | 15,600 | 20,125 | 20,425 | 33,602 | 55 | 4 | 2,787 | 195 | 58,338 | |
| 3 Boone..... | 114 | 400,290 | 46,875 | 46,290 | 39,736 | 223,359 | 146 | 29 | 19,590 | 680 | 315,833 | |
| 4 Cedar Falls..... | 67 | 658,605 | 144,855 | 134,550 | 140,410 | 238,700 | 76 | 33 | 23,703 | 315 | 123,090 | |
| 5 Centerville..... | 54 | 173,910 | 29,850 | 43,450 | 74,245 | 26,365 | 59 | 13 | 6,931 | 203 | 82,667 | |
| 6 Chariton..... | 46 | 126,090 | 8,770 | 17,890 | 24,338 | 75,092 | 52 | 5 | 3,549 | 175 | 64,837 | |
| 7 Charles City..... | 61 | 288,313 | 59,400 | 58,967 | 60,581 | 109,365 | 73 | 6 | 4,326 | 184 | 77,479 | |
| 8 Clarinda..... | 44 | 126,706 | 3,325 | 27,860 | 31,206 | 59,315 | 57 | 4 | 1,659 | 85 | 33,449 | |
| 9 Cresco..... | 55 | 135,030 | 9,185 | 81,390 | 29,435 | 65,020 | 69 | 6 | 1,425 | 96 | 34,910 | |
| 10 Creston..... | 103 | 398,925 | 25,735 | 132,202 | 157,675 | 33,313 | 105 | 29 | 22,295 | 418 | 177,476 | |
| 11 Decorah..... | 35 | 818,540 | 26,750 | 69,175 | 78,305 | 144,310 | 97 | 8 | 5,491 | 174 | 75,619 | |
| 12 Fort Dodge..... | 88 | 903,834 | 81,389 | 171,875 | 303,774 | 346,796 | 88 | 89 | 62,621 | 527 | 224,121 | |
| 13 Fort Madison..... | 83 | 1,546,574 | 86,395 | 272,923 | 338,276 | 348,980 | 75 | 74 | 92,338 | 966 | 409,351 | |
| 14 Grinnell..... | 81 | 812,940 | 14,437 | 39,853 | 46,658 | 711,902 | 102 | 33 | 23,207 | 334 | 145,664 | |
| 15 Independence..... | 57 | 312,405 | 35,800 | 58,850 | 109,530 | 108,225 | 56 | 8 | 5,000 | 159 | 57,375 | |
| 16 Iowa City..... | 129 | 1,003,969 | 85,750 | 153,000 | 253,436 | 511,783 | 136 | 148 | 70,399 | 680 | 299,314 | |
| 17 Keokuk..... | 138 | 2,103,335 | 107,565 | 219,295 | 551,371 | 1,225,104 | 197 | 349 | 436,067 | 1,665 | 614,580 | |
| 18 Le Mars..... | 69 | 555,662 | 91,600 | 125,375 | 156,487 | 181,200 | 78 | 16 | 16,700 | 190 | 85,804 | |
| 19 Marion..... | 55 | 113,970 | 12,700 | 23,955 | 35,760 | 41,555 | 69 | 2 | 1,800 | 79 | 35,066 | |
| 20 Marshalltown..... | 147 | 5,366,270 | 1,475,580 | 1,567,495 | 1,696,668 | 1,126,527 | 170 | 107 | 109,286 | 1,399 | 654,227 | |
| 21 Mason City..... | 89 | 351,868 | 50,300 | 63,317 | 87,238 | 145,013 | 108 | 26 | 19,336 | 376 | 167,211 | |
| 22 Muscatine..... | 247 | 3,725,971 | 211,295 | 308,201 | 651,707 | 2,554,768 | 295 | 140 | 132,675 | 2,335 | 1,055,904 | |
| 23 Newton..... | 86 | 443,138 | 21,425 | 34,000 | 49,822 | 337,886 | 106 | 64 | 43,165 | 312 | 121,843 | |
| 24 Oelwein..... | 37 | 614,599 | 21,400 | 346,479 | 95,470 | 151,250 | 41 | 15 | 10,660 | 611 | 270,922 | |
| 25 Osage..... | 37 | 82,090 | 12,650 | 16,400 | 18,700 | 34,340 | 45 | 1 | 420 | 68 | 29,895 | |
| 26 Oskaloosa..... | 143 | 552,239 | 53,600 | 73,840 | 146,518 | 278,281 | 171 | 49 | 29,821 | 588 | 262,228 | |
| 27 Ottumwa..... | 160 | 3,403,321 | 96,670 | 555,785 | 457,588 | 2,293,328 | 188 | 208 | 177,022 | 2,095 | 804,215 | |
| 28 Shenandoah..... | 56 | 236,623 | 28,075 | 46,662 | 73,171 | 88,115 | 65 | 5 | 4,330 | 213 | 87,073 | |
| 29 Vinton..... | 63 | 198,237 | 15,855 | 46,325 | 56,473 | 79,584 | 81 | 8 | 6,470 | 231 | 76,001 | |
| 30 Waterloo..... | 147 | 1,237,056 | 136,800 | 194,946 | 335,224 | 620,086 | 142 | 108 | 80,014 | 1,042 | 471,608 | |
| 31 Webster City..... | 33 | 348,453 | 34,100 | 71,023 | 87,852 | 155,475 | 36 | 24 | 14,630 | 205 | 78,297 | |
| 32 What Cheer..... | 41 | 132,408 | 9,250 | 28,950 | 30,250 | 63,958 | 51 | 15 | 7,931 | 58 | 25,927 | |

BY SPECIFIED INDUSTRIES: 1900—Continued.

SIOUX CITY—Continued.

| AVERAGE NUMBER OF WAGE-EARNERS AND TOTAL WAGES—Continued. | | | | | | MISCELLANEOUS EXPENSES. | | | | | COST OF MATERIALS USED. | | | Value of products, including custom work and repairing. | |
|---|---------|---------------------------|---------|---------------------------|--------|-------------------------|----------------|--|---------------------------------|----------------|-------------------------|---|----------------------------------|---|----|
| Men, 16 years and over. | | Women, 16 years and over. | | Children, under 16 years. | | Total. | Rent of works. | Taxes, not including internal revenue. | Rent of offices, interest, etc. | Contract work. | Total. | Principal materials, including mill supplies and freight. | Fuel and rent of power and heat. | | |
| Average number. | Wages. | Average number. | Wages. | Average number. | Wages. | | | | | | | | | | |
| 10 | \$4,065 | | | | | \$8,575 | \$130 | \$126 | \$8,819 | | \$10,401 | \$9,919 | \$482 | \$32,669 | 22 |
| 80 | 17,463 | | | | | 3,045 | 1,519 | 81 | 1,495 | | 16,650 | 16,600 | 50 | 52,337 | 23 |
| 28 | 18,598 | | | 1 | \$116 | 2,448 | 480 | 250 | 1,718 | | 21,871 | 21,871 | | 53,786 | 24 |
| 22 | 14,421 | | | | | 3,393 | 300 | | 3,093 | | 23,185 | 23,038 | 97 | 44,323 | 25 |
| 6 | 4,299 | 4 | \$1,832 | | | 4,027 | 2,426 | 27 | 1,674 | | 9,946 | 9,946 | | 31,045 | 26 |
| 50 | 26,047 | | | | | 11,902 | 2,640 | 202 | 9,060 | | 64,608 | 64,608 | | 128,737 | 27 |
| 70 | 26,371 | 6 | 1,408 | 2 | 364 | 15,119 | 3,759 | 976 | 10,385 | | 40,532 | 38,744 | 1,788 | 118,232 | 28 |
| 166 | 107,114 | 14 | 2,411 | 2 | 309 | 33,175 | 1,862 | 1,709 | 27,780 | \$1,524 | 58,447 | 56,648 | 1,799 | 302,197 | 29 |
| 9 | 5,088 | | | | | 1,168 | 516 | 22 | 680 | | 13,712 | 13,712 | | 24,565 | 30 |
| 82 | 16,503 | | | 4 | 208 | 8,177 | 3,015 | 530 | 4,632 | | 64,464 | 64,184 | 280 | 116,569 | 31 |
| 23 | 13,618 | | | | | 2,247 | 1,344 | 61 | 842 | | 15,998 | 15,898 | 100 | 33,488 | 32 |
| 85 | 48,904 | | | 8 | 1,106 | 26,258 | 3,827 | 367 | 22,064 | | 62,327 | 62,105 | 222 | 170,842 | 33 |
| 21 | 12,419 | | | | | 3,538 | 2,695 | 22 | 821 | | 15,545 | 15,509 | 36 | 41,168 | 34 |
| 1,405 | 736,624 | 211 | 47,157 | 32 | 5,971 | 416,288 | 13,680 | 15,551 | 386,407 | 650 | 8,817,794 | 8,700,209 | 117,685 | 11,935,872 | 35 |

monuments and tombstones, 2; musical instruments and materials, not specified, 1; oil, linseed, 1; paper goods, not elsewhere specified, 1; patent medicines and compounds, 1; plastering and stuccowork, 1; rubber and elastic goods, 1; shirts, 1; slaughtering and meat packing, wholesale, 2; slaughtering, wholesale, not including meat packing, 1; soap and candles, 1; starch, 1; trunks and valises, 2; typewriter repairing, 1; vinegar and cider, 2; wirework, including wire rope and cable, 1.

UNDER 20,000 IN POPULATION: 1900.

| | | | | | | | | | | | | | | | |
|--------|-------------|-------|-----------|-----|----------|-------------|-----------|-----------|-------------|-----------|--------------|--------------|-----------|--------------|----|
| 14,153 | \$6,450,378 | 2,286 | \$502,624 | 559 | \$76,830 | \$1,642,032 | \$277,040 | \$132,268 | \$1,067,444 | \$165,230 | \$26,139,019 | \$25,640,627 | \$498,892 | \$42,398,348 | 1 |
| 123 | 57,132 | 6 | 983 | 2 | 218 | 8,819 | 2,568 | 755 | 3,296 | 2,200 | 122,413 | 118,704 | 3,709 | 232,581 | 2 |
| 592 | 300,906 | 60 | 12,640 | 28 | 2,287 | 23,725 | 14,450 | 8,694 | 10,846 | 235 | 471,794 | 455,155 | 16,639 | 975,645 | 3 |
| 239 | 108,035 | 75 | 14,935 | 1 | 120 | 55,380 | 5,239 | 4,335 | 45,835 | 70 | 678,000 | 671,360 | 6,700 | 1,049,557 | 4 |
| 162 | 76,230 | 36 | 7,027 | 5 | 850 | 14,695 | 3,673 | 1,936 | 3,986 | 5,100 | 168,272 | 162,259 | 6,013 | 341,169 | 5 |
| 147 | 60,517 | 24 | 3,940 | 4 | 380 | 12,068 | 6,070 | 658 | 8,140 | 1,200 | 155,346 | 152,477 | 2,869 | 323,900 | 6 |
| 166 | 73,604 | 15 | 3,819 | 3 | 156 | 15,021 | 3,944 | 1,655 | 3,892 | 580 | 231,804 | 227,352 | 4,452 | 438,985 | 7 |
| 74 | 31,187 | 10 | 2,140 | 1 | 142 | 9,434 | 2,759 | 1,017 | 3,618 | 2,040 | 97,158 | 94,551 | 2,677 | 179,995 | 8 |
| 88 | 35,525 | 5 | 850 | 3 | 535 | 7,554 | 3,469 | 733 | 3,820 | 512 | 168,183 | 164,618 | 3,565 | 294,772 | 9 |
| 370 | 169,715 | 48 | 7,761 | | | 29,743 | 10,015 | 5,450 | 12,412 | 1,860 | 344,910 | 336,720 | 8,190 | 683,739 | 10 |
| 144 | 69,350 | 29 | 6,199 | 1 | 60 | 23,762 | 6,236 | 1,936 | 14,560 | 1,030 | 221,213 | 215,651 | 5,562 | 443,345 | 11 |
| 427 | 197,921 | 93 | 25,183 | 7 | 1,020 | 33,642 | 10,233 | 4,681 | 23,573 | 150 | 793,266 | 762,000 | 31,266 | 1,263,385 | 12 |
| 930 | 403,613 | 30 | 5,139 | 6 | 594 | 95,455 | 6,646 | 13,109 | 51,592 | 24,108 | 870,482 | 841,398 | 29,084 | 1,737,254 | 13 |
| 270 | 125,610 | 64 | 20,054 | | | 37,045 | 4,259 | 1,357 | 18,746 | 12,633 | 423,632 | 421,677 | 4,955 | 1,004,642 | 14 |
| 129 | 52,210 | 21 | 3,990 | 9 | 1,175 | 14,766 | 5,171 | 1,730 | 7,556 | | 163,291 | 159,840 | 3,452 | 314,179 | 15 |
| 536 | 273,222 | 131 | 23,914 | 13 | 2,178 | 89,077 | 17,682 | 5,055 | 65,615 | 825 | 781,780 | 768,416 | 13,364 | 1,511,065 | 16 |
| 1,145 | 503,461 | 440 | 99,898 | 80 | 11,311 | 196,578 | 23,155 | 10,333 | 127,642 | 95,893 | 1,882,227 | 1,857,284 | 24,943 | 3,660,047 | 17 |
| 170 | 31,513 | 20 | 4,291 | | | 52,658 | 6,296 | 3,337 | 42,498 | 527 | 600,859 | 676,874 | 13,985 | 956,680 | 18 |
| 62 | 31,464 | 17 | 3,602 | | | 9,627 | 4,294 | 833 | 4,250 | 200 | 117,978 | 114,998 | 2,980 | 244,545 | 19 |
| 1,306 | 636,427 | 89 | 17,405 | | | 190,154 | 22,937 | 8,663 | 163,554 | | 3,120,658 | 3,093,637 | 116,971 | 4,587,240 | 20 |
| 322 | 156,336 | 52 | 10,733 | 2 | 142 | 21,013 | 7,001 | 2,339 | 10,623 | 1,050 | 330,110 | 312,045 | 18,065 | 705,460 | 21 |
| 2,312 | 951,694 | 364 | 80,157 | 159 | 24,053 | 212,703 | 18,652 | 24,320 | 121,366 | 48,365 | 3,773,379 | 3,743,119 | 30,260 | 5,791,110 | 22 |
| 225 | 108,505 | 86 | 12,090 | 1 | 48 | 44,768 | 7,216 | 2,216 | 24,478 | 10,853 | 244,402 | 240,245 | 4,157 | 666,727 | 23 |
| 500 | 277,402 | 10 | 2,420 | 1 | 100 | 10,081 | 4,447 | 1,183 | 4,446 | | 337,360 | 321,958 | 15,402 | 674,637 | 24 |
| 53 | 26,932 | 15 | 2,963 | | | 6,795 | 2,372 | 456 | 3,967 | | 120,174 | 117,616 | 2,558 | 202,405 | 25 |
| 477 | 237,050 | 91 | 22,909 | 20 | 2,229 | 67,753 | 18,329 | 3,485 | 32,714 | 13,225 | 490,982 | 475,486 | 15,496 | 1,063,584 | 26 |
| 1,721 | 724,382 | 223 | 59,395 | 151 | 20,423 | 200,673 | 26,420 | 13,330 | 159,511 | 1,412 | 7,093,068 | 7,036,809 | 56,259 | 9,129,362 | 27 |
| 170 | 80,517 | 33 | 5,784 | 10 | 777 | 12,076 | 3,725 | 1,518 | 6,333 | | 200,213 | 192,803 | 7,410 | 332,740 | 28 |
| 165 | 60,779 | 59 | 13,806 | 7 | 1,416 | 31,881 | 8,460 | 1,368 | 25,634 | 1,422 | 206,150 | 200,621 | 5,529 | 440,137 | 29 |
| 899 | 446,625 | 118 | 21,337 | 25 | 3,846 | 81,642 | 22,308 | 8,201 | 50,943 | 100 | 1,555,578 | 1,534,642 | 20,936 | 2,499,361 | 30 |
| 176 | 70,951 | 16 | 5,186 | 13 | 2,160 | 16,362 | 2,851 | 1,535 | 12,477 | | 183,170 | 179,973 | 17,197 | 415,163 | 31 |
| 60 | 24,468 | 6 | 1,259 | 2 | 200 | 6,578 | 2,023 | 940 | 3,465 | 150 | 93,167 | 89,820 | 3,347 | 184,436 | 32 |

CENSUS BULLETIN.

No. 115.

WASHINGTON, D. C.

November 27, 1901.

MANUFACTURES.

KANSAS.

HON. WILLIAM R. MERRIAM,
Director of the Census.

SIR: I transmit herewith, for publication in bulletin form, the statistics of manufacturing and mechanical industries for the state of Kansas for the census year 1900, taken in accordance with the provisions of section 7 of the act of March 3, 1899. This section requires that "The schedules of inquiries relating to the products of manufacturing and mechanical establishments shall embrace the name and location of each establishment; character of organization, whether individual, cooperative, or other form; date of commencement of operations; character of business or kind of goods manufactured; amount of capital invested; number of proprietors, firm members, co-partners, or officers, and the amount of their salaries; number of employees, and the amount of their wages; quantity and cost of materials used in manufactures; amount of miscellaneous expenses; quantity and value of products; time in operation during the census year; character and quantity of power used; and character and number of machines employed."

In each of the above particulars the requirements of the law have been observed, but certain of the data thus elicited are reserved for publication in the final volumes.

There were 36 cities in the state withdrawn from the enumerators and their manufacturing statistics collected by special agents in accordance with the further provision of section 7 of the Census Act. Wherever the phrase "urban manufactures" is used in this bulletin, it applies only to those cities which were withdrawn from the enumerators and committed to special agents, and only to the manufacturing establishments within the corporate limits of such places.

Four cities in Kansas contain a population exceeding 20,000 each: Kansas City, Leavenworth, Topeka, and Wichita. The manufacturing statistics of these 4 cities are presented by specified industries, and the statistics of Kansas City, Topeka, and Wichita are presented in comparison with the returns of the Eleventh Census. The statistics of Leavenworth were not shown separately in 1890, and comparisons with that year are, therefore, not possible in this case.

Mr. W. L. A. Johnson, Commissioner of the Kansas Bureau of Labor and Industrial Statistics, rendered

valuable assistance in the preparation of the text for the accompanying report.

The statistics of Kansas are presented in 9 tables: Table 1 showing comparative figures for the state at the several censuses; Table 2 showing all the industries of the state divided between the hand trades and the manufactures proper, and also the statistics of educational, eleemosynary, and penal institutions, and establishments with a product of less than \$500, which two latter classes were not reported at previous censuses; Table 3 showing the statistics of the 7 leading industries of the state for 1890 and 1900; Table 4 showing the totals for the cities of Kansas City, Topeka, and Wichita at the censuses of 1890 and 1900; Table 5 showing the urban manufactures of the state in comparison with the totals for the entire state and the state outside of the cities withdrawn from the enumerators; Table 6 showing the statistics for the state by counties; Table 7 showing the statistics for the state by specified industries; Table 8 showing the statistics for the cities of Kansas City, Leavenworth, Topeka, and Wichita by specified industries; and Table 9 showing the totals for all industries in each of the cities withdrawn from the enumerators (exclusive of those shown in Table 8).

Table 1 shows the growth of manufactures in Kansas for the forty years which terminate with the Twelfth Census. Owing to changes in the method of taking the census, comparisons between the earlier and later decades, represented in Table 1, should be drawn only in the most general way. Nevertheless, the rate of growth in Kansas manufactures may be fairly inferred from the figures given.

In drafting the schedules of inquiry for the census of 1900 care was taken to preserve the basis of comparison with prior censuses. Comparison may be made safely with respect to all the items of inquiry except those relating to capital, salaried officials, clerks, etc., and their salaries, the average number of employees, and the total amount of wages paid. Live capital, that is, cash on hand, bills receivable, unsettled ledger accounts, raw materials, stock in process of manufacture, finished products on hand, and other sundries, was first called for at the census of 1890. No definite attempt was made, prior to the census of 1890, to secure a return of live capital invested.

Changes were made in the inquiries relating to employees and wages in order to eliminate defects found to

exist on the form of inquiry adopted in 1890. At the census of 1890 the average number of persons employed during the entire year was called for, and also the average number employed at stated weekly rates of pay, and the average number was computed for the actual time the establishments were reported as being in operation. At the census of 1900 the greatest and least numbers of employees were reported, and also the average number employed during each month of the year. The average number of wage-earners (men, women, and children) employed during the entire year was ascertained by using 12, the number of calendar months, as a divisor into the total of the average numbers reported for each month. This difference in the method of ascertaining the average number of wage-earners during the entire year may have resulted in a variation in the number, and should be considered in making comparisons.

At the census of 1890 the number and salaries of proprietors and firm members actively engaged in the business or in supervision were reported, combined with clerks and other officials. In cases where proprietors and firm members were reported without salaries, the amount that would ordinarily be paid for similar services was estimated. At the census of 1900 only the number of proprietors and firm members actively engaged in the industry or in supervision was ascertained, and no salaries were reported for this class. It is therefore impossible to compare the number and salaries of salaried officials of any character for the two censuses.

Furthermore, the schedules for 1890 included in the wage-earning class, overseers, foremen, and superintendents (not general superintendents or managers), while the census of 1900 separates from the wage-earning class such salaried employees as general superintendents, clerks, and salesmen. It is possible and probable that this change in the form of the question has resulted in eliminating from the wage-earners, as reported by the present census, many high-salaried employees included in that group for the census of 1890.

In some instances, the number of proprietors and firm members, shown in the accompanying tables, falls short of the number of establishments reported. This is accounted for by the fact that no proprietors or firm members are reported for corporations or cooperative establishments. The number of salaried officials, clerks, etc., is the greatest number reported employed at any one time during the year. This number may appear excessive as compared with the amount of salaries paid; but allowance should be made for the fact that a considerable number of clerks are employed for only a part of the year; consequently the amount they receive would be small if reckoned as an annual salary.

The reports show a capital of \$66,827,362 invested in manufactures and mechanical industries in the 7,830 estab-

lishments reporting for the state of Kansas. This sum represents the value of land, buildings, machinery, tools, and implements, and the live capital utilized, but does not include the capital stock of any of the manufacturing corporations of the state of Kansas. The value of the products is returned at \$172,129,398, to produce which involved an outlay of \$3,256,086, for salaries of officials, clerks, etc.; \$16,817,689 for wages, \$5,241,450 for miscellaneous expenses, including rent, taxes, etc., and \$129,485,320 for materials used, mill supplies, freight, and fuel. It is not to be assumed, however, that the difference between the aggregate of these sums and the value of the products is, in any sense, indicative of the profits in the manufacture of the products during the census year. The census schedule takes no cognizance of the cost of selling manufactured articles, or of interest on capital invested, or of the mercantile losses incurred in the business, or of depreciation in plant. The value of the product given is the value as obtained or fixed at the shop or factory. This statement is necessary in order to avoid erroneous conclusions from the figures presented.

The value of products for the state of Kansas, \$172,129,398, is the gross value, and not the net or true value. The difference between these two should be carefully noted. The gross value is found by adding the values of products in the separate establishments. But the finished product of one establishment is often the raw material for another. In such cases the value of the former reappears in the latter, and thus the original cost of certain materials may be included several times in the gross value. The net or true value is found by subtracting from the gross value the value of all materials purchased in a partly manufactured form. In this way the duplications in the gross value are eliminated.

At the census of 1890 the schedule was so framed that it was impossible to find the net or true value. In the present census the schedule asked for the value of the materials in two classes, those purchased in the crude state and those purchased in the partly manufactured form. From the answers to these questions the net or true value of products may be computed. Thus, for Kansas, the gross value of products for 1900 was \$172,129,398. The value of materials purchased in a partly manufactured form was \$36,032,460. The difference, \$136,096,929, is the net or true value of products, and represents the increase in the value of raw materials resulting from the various processes of manufacture.

Very respectfully,



Chief Statistician for Manufactures.

KANSAS.

Kansas was organized as a territory in 1854, and therefore first appeared in census statistics in 1860.

Table 1 shows the manufacturing and mechanical industries of the state as returned at the censuses of 1860 to 1900, inclusive, with the percentages of increase for each decade. This table also presents the average number of

wage-earners employed by manufacturing establishments, in comparison with the total population of the state, and the value of the land and buildings owned and reported by manufacturers as capital, in comparison with the assessed value of all real estate and improvements.

TABLE 1.—COMPARATIVE SUMMARY, 1860 TO 1900, WITH PER CENT OF INCREASE FOR EACH DECADE.

| | DATE OF CENSUS. | | | | | PER CENT OF INCREASE. | | | |
|--|-----------------|---------------|---------------|--------------|--------------|-----------------------|--------------------|--------------------|--------------------|
| | 1900 | 1890 | 1880 | 1870 | 1860 | 1890 to 1900 | 1880 to 1890 | 1870 to 1880 | 1860 to 1870 |
| Number of establishments | 7,880 | 4,471 | 2,808 | 1,477 | 814 | 75.1 | 59.5 | 89.8 | 329.4 |
| Capital | \$66,827,362 | \$48,926,002 | \$11,192,315 | \$4,319,060 | \$1,084,935 | 52.1 | 292.5 | 159.1 | 298.1 |
| Salaried officials, clerks, etc., number | 3,860 | 14,606 | (2) | (2) | (2) | 16.2 | | | |
| Salaries | \$3,256,086 | \$3,040,310 | (2) | (2) | (2) | 7.1 | | | |
| Wage-earners, average number | 35,193 | 28,237 | 12,062 | 6,844 | 1,735 | 24.6 | 134.1 | 76.2 | 294.5 |
| Total wages | \$16,817,689 | \$13,233,175 | \$3,995,010 | \$2,377,511 | \$380,346 | 22.8 | 232.6 | 68.0 | 170.1 |
| Men, 16 years and over | 31,171 | 24,846 | 11,139 | 6,599 | 1,700 | 25.5 | 128.1 | 68.8 | 288.2 |
| Wages | \$15,444,390 | \$12,727,955 | (2) | (2) | (2) | 21.3 | | | |
| Women, 16 years and over | 3,162 | 2,510 | 392 | 118 | 85 | 26.0 | 540.3 | 232.2 | 237.1 |
| Wages | \$743,886 | \$484,521 | (2) | (2) | (2) | 51.5 | | | |
| Children, under 16 years | 860 | 831 | 581 | 127 | (2) | 2.4 | 65.9 | 818.1 | |
| Wages | \$129,413 | \$75,699 | (2) | (2) | (2) | 71.0 | | | |
| Miscellaneous expenses | \$5,241,450 | \$5,853,466 | (4) | (4) | (4) | 10.5 | | | |
| Cost of materials used | \$129,485,320 | \$78,845,167 | \$21,453,141 | \$6,112,163 | \$1,444,975 | 64.2 | 267.5 | 251.0 | 323.0 |
| Value of products, including custom work and repairing | \$172,129,398 | \$110,219,805 | \$30,843,777 | \$11,775,333 | \$4,357,408 | 56.2 | 257.3 | 161.9 | 170.2 |
| Total population | 1,468,469 | 1,427,096 | 996,096 | 361,399 | 107,206 | 2.9 | 43.3 | 173.4 | 239.9 |
| Wage-earners engaged in manufactures | 35,193 | 28,237 | 12,062 | 6,844 | 1,735 | 24.6 | 184.1 | 76.2 | 294.5 |
| Per cent of total population | 2.4 | 2.0 | 1.2 | 1.9 | 1.6 | | | | |
| Assessed value of real estate | \$224,905,237 | \$241,100,071 | \$108,432,049 | \$65,499,365 | \$16,038,002 | 6.7 | 122.4 | 65.5 | 307.1 |
| Value of land and buildings invested in manufactures | \$21,136,733 | \$13,450,353 | (2) | (2) | (2) | 57.5 | | | |
| Per cent of assessed value | 9.4 | 5.6 | | | | | | | |

¹ Includes proprietors and firm members, with their salaries; number only reported in 1900. (See Table 7.)

² Not reported separately.

³ Decrease.

⁴ Not reported.

⁵ Exclusive of 2,026 Indians and other persons on Indian reservations, which classes were not included at previous censuses.

⁶ As given in letter of the auditor of the state of Kansas.

⁷ Does not include value of rented property.

Although agriculture and stock raising are the leading pursuits of Kansas, manufacturing and mechanical industries have had a considerable growth during the last forty years. The total population of the state in 1860 was 107,206, and in 1900, 1,468,469, an increase in the forty years of 1,361,263, or 1,269.8 per cent. The average number of wage-earners employed in manufacturing establishments has increased from 1,735 in 1860 to 35,193 in 1900, an increase of 1,928.4 per cent in the forty years, and embraced, in the latter year, 2.4 per cent of the entire population, as compared with 1.6 per cent in 1860. Probably the best indication of the importance of the wage-

earning class is afforded by the greatest number employed at any one time during the year. In 1900 this was 48,306, or 3.3 per cent of the total population of the state. The greatest increase in the value of products, 257.3 per cent, was for the decade ending with 1890.

Table 2 divides the industries of the state between the hand trades and the manufactures proper. This table also gives the statistics for educational, eleemosynary, and penal institutions, and establishments with a product of less than \$500; these were not reported at previous censuses, and are, therefore, omitted from the other tables and their use confined to Table 2.

TABLE 2.—SUMMARY FOR ALL ESTABLISHMENTS.

| CLASSES. | Number of establishments. | Capital. | Proprietors and firm members. | WAGE-EARNERS. | | Miscellaneous expenses. | COST OF MATERIALS USED. | | | | Value of products, including custom work and repairing. |
|---|---------------------------|--------------|-------------------------------|-----------------|--------------|-------------------------|-------------------------|-------------------------|---|---------------------|---|
| | | | | Average number. | Total wages. | | Total. | Purchased in raw state. | Purchased in partially manufactured form. | Fuel, freight, etc. | |
| Total | 10,831 | \$68,101,312 | 11,519 | 35,889 | \$16,376,859 | \$5,291,863 | \$120,830,261 | \$90,433,416 | \$36,245,429 | \$3,151,416 | \$173,031,692 |
| Hand trades ¹ | 3,985 | 4,095,763 | 4,593 | 5,823 | 2,491,044 | 615,640 | 5,456,653 | 116,937 | 5,130,762 | 208,954 | 12,056,747 |
| Educational, eleemosynary, and penal institutions | 13 | 506,267 | 1 | 251 | 38,003 | 3,071 | 139,658 | 93,165 | 27,588 | 13,905 | 285,881 |
| Establishments with a product of less than \$500 | 2,488 | 767,683 | 2,646 | 445 | 20,667 | 47,742 | 205,283 | 19,911 | 185,372 | | 616,413 |
| All other establishments | 3,845 | 62,731,599 | 4,274 | 29,370 | 13,826,645 | 4,625,810 | 124,028,667 | 90,203,403 | 30,901,707 | 2,923,557 | 160,072,651 |

¹ Includes bicycle and tricycle repairing, 62; blacksmithing and wheelwrighting, 1,414; boots and shoes, custom work and repairing, 297; carpentering, 475; clothing, men's, custom work and repairing, 250; clothing, women's, dressmaking, 130; dyeing and cleaning, 12; furniture, cabinetmaking, repairing, and upholstering, 63; lock and gun smithing, 39; masonry, brick and stone, 97; millinery, custom work, 461; painting, house, sign, etc., 215; paper hanging, 25; plastering and stuccowork, 60; plumbing, and gas and steam fitting, 88; sewing machine repairing, 4; watch, clock, and jewelry repairing, 293.

Of the 10,831 establishments of all classes shown in this table, 6,473, or 62.7 per cent, were small shops included in the groups of "hand trades" and "establishments with a product of less than \$500." The value of the products of these establishments, consisting principally of the sums received for custom work and repairing,

amounted to \$12,673,160, or only 7.3 per cent of the total value of the products of the state.

In addition to the 10,831 active establishments in the state during the census year, with a capital of \$68,101,312, shown in Table 2, there were 52 idle establishments, with a capital of \$1,689,755, divided as follows:

| INDUSTRIES. | Number of idle establishments. | Capital. | INDUSTRIES. | Number of idle establishments. | Capital. |
|--|--------------------------------|----------|------------------------------|--------------------------------|----------|
| Brick and tile | 2 | \$15,685 | Salt | 3 | \$22,000 |
| Flouring and grist mill products | 21 | 186,975 | Starch | 1 | 950,000 |
| Ice, artificial | 1 | 3,000 | Sugar and molasses, refining | 1 | 85,000 |
| Lumber and timber products | 2 | 6,450 | Wire | 1 | 120,000 |
| Lumber, planing mill products, including sash, doors, and blinds | 2 | 9,000 | Woolen goods | 1 | 8,000 |
| Oil, linseed | 1 | 30,000 | Zinc, smelting and refining | 1 | 42,000 |
| Printing and publishing, newspapers and periodicals | 5 | 3,800 | All other industries | 10 | 7,245 |

TABLE 3.—COMPARATIVE SUMMARY OF SEVEN LEADING INDUSTRIES.

| INDUSTRIES. | Year. | Number of establishments. | Capital. | WAGE-EARNERS. | | Miscellaneous expenses. | Cost of materials used. | Value of products, including custom work and repairing. |
|---|-------|---------------------------|--------------|-----------------|--------------|-------------------------|-------------------------|---|
| | | | | Average number. | Total Wages. | | | |
| Total for selected industries for state | 1900 | 867 | \$37,540,472 | 13,465 | \$9,459,963 | \$3,016,892 | \$99,486,943 | \$119,485,746 |
| | 1890 | 575 | 24,020,526 | 11,612 | 6,344,399 | 4,110,933 | 55,006,561 | 70,653,921 |
| Increase, 1890 to 1900 | | 292 | 13,519,946 | 6,853 | 3,115,564 | 1,094,041 | 44,479,782 | 48,831,825 |
| Per cent of increase | | 50.8 | 56.3 | 59.0 | 49.1 | 126.6 | 80.9 | 69.1 |
| Per cent of total of all industries in state | 1900 | 11.1 | 56.2 | 52.5 | 58.0 | 57.6 | 76.8 | 69.4 |
| | 1890 | 12.9 | 54.7 | 41.1 | 47.7 | 70.2 | 69.8 | 64.1 |
| Cars and general shop construction and repairs by steam railroad companies. | 1900 | 37 | 2,931,699 | 5,592 | 3,476,400 | 101,457 | 8,071,173 | 6,316,316 |
| | 1890 | 26 | 1,683,210 | 2,819 | 1,722,326 | (²) | 1,874,640 | 3,644,038 |
| Cheese, butter, and condensed milk, factory product. | 1900 | 171 | 1,130,595 | 395 | 167,293 | 71,383 | 3,062,335 | 3,652,530 |
| | 1890 | 101 | 433,792 | 271 | 94,449 | 22,939 | 713,677 | 919,787 |
| Flouring and grist mill products. | 1900 | 533 | 3,366,966 | 1,451 | 743,462 | 447,747 | 18,595,258 | 21,926,768 |
| | 1890 | 348 | 7,844,280 | 1,623 | 734,058 | 599,986 | 14,285,990 | 17,420,475 |
| Foundry and machine shop products. | 1900 | 94 | 2,450,324 | 1,246 | 716,633 | 113,929 | 1,470,774 | 2,804,263 |
| | 1890 | 69 | 2,624,807 | 1,501 | 915,058 | 145,683 | 1,214,567 | 2,756,825 |
| Slaughtering: | 1900 | 14 | 16,436,177 | 8,117 | 3,575,049 | 2,003,771 | 67,908,960 | 77,411,883 |
| | 1890 | 18 | 11,036,058 | 5,018 | 2,646,309 | 3,322,200 | 36,120,014 | 44,696,077 |
| Slaughtering and meat packing, wholesale. | 1900 | 11 | 16,410,477 | 8,068 | 3,543,777 | 2,000,935 | 67,402,245 | 76,820,139 |
| | 1890 | 15 | 11,064,683 | 5,008 | 2,642,529 | 3,318,262 | 36,031,824 | 44,592,071 |
| Slaughtering, wholesale, not including meat packing. | 1900 | 3 | 75,700 | 49 | 31,272 | 3,736 | 506,715 | 582,744 |
| | 1890 | 3 | 21,375 | 10 | 3,780 | 3,938 | 88,190 | 103,406 |
| Soap and candles. | 1900 | 7 | 947,182 | 177 | 75,273 | 197,436 | 608,897 | 1,083,337 |
| | 1890 | 9 | 130,379 | 39 | 15,429 | 15,905 | 160,667 | 253,219 |
| Zinc, smelting and refining | 1900 | 11 | 5,218,529 | 1,487 | 705,803 | 81,169 | 4,678,946 | 5,790,141 |
| | 1890 | 4 | 218,000 | 341 | 216,770 | 4,220 | 637,000 | 963,500 |

¹ Decrease.

² Not reported at the census of 1890.

The 7 leading industries of the state in 1900, as shown in Table 3, embraced 867 establishments, or 11.1 per cent of the total number in the state; used a capital of \$37,540,472, or 56.2 per cent of the total; gave employment to 18,465 wage-earners, or 52.5 per cent of the total number; and paid \$9,459,963, or 58 per cent of the total wages. The value of their products was \$119,485,746, or 69.4 per cent of the total. In the discussion of Table 3 which follows, these industries are ranked with reference to the value of their products.

Table 3 shows that slaughtering and meat packing is the most important industry in the state. The 14 establishments reported in 1900 gave employment to 8,117 wage-earners, or 23.1 per cent of the wage-earners employed in the state, and the products were valued at \$77,411,883, or 45 per cent of the total value of the products of the state. In 1890 there were 18 establishments, 5,018 wage-earners, and products valued at \$44,696,077. The increase in value of products, during the decade, was 73.2 per cent. Kansas is one of the leading stock-raising states of the country, having marketed 3,330,944 head of cattle in 1899, valued at \$67,499,112, and slaughtering and meat packing forms a splendid auxiliary to that great industry. Kansas City, Kans., is next to the largest meat-packing city in the world, and has within its limits the largest single packing house in existence, covering 90 acres of floor space. There is scarcely a nation in the world to which these Kansas establishments do not send their products.¹

Allied to slaughtering and meat packing is the manufacture of soap and candles. There were 7 establishments engaged in this industry in 1900, with 177 wage-earners, and products valued at \$1,083,337. In 1890 there were 9 establishments, 39 wage-earners, and products valued at \$253,219. The value of products increased 327.8 per cent during the decade. The establishments engaged in this industry make considerable use of the oils, fatty matter, offal, and other waste products of the slaughtering and meat-packing houses.

Flour and grist milling ranks second in importance, with 533 establishments, 1,451 wage-earners, and products valued at \$21,926,768. In 1890 there were 348 establishments, 1,623 wage-earners, and products valued at \$17,420,475. The increase in the value of products during the decade was 25.9 per cent. The industry began in this state as early as 1861, when a mill was established by S. C. Pomeroy at Atchison, Kans. The inability of the smaller mills to cope with the larger ones in the manufacture of flour products, together with a variation of rates for long hauls, has made it difficult for the milling industry to extend as rapidly as circumstances would seem to warrant, for although Kansas raised 82,486,655 bushels of wheat in 1900, valued at \$46,165,656, or 3.3 per cent of the wheat crop of the world, only 24 per cent of the Kansas crop was ground by the mills of the state.²

Car construction and general shop work by steam railroad companies holds third place among the manufacturing industries of the state. There were 37 establish-

ments reported in 1900, with 5,592 wage-earners, and products valued at \$6,816,816. In 1890 there were 26 establishments, 2,819 wage-earners, and products valued at \$3,644,038. The increase in the value of products during the decade was 87.1 per cent. The importance of this industry in Kansas is indirectly due to its vast agricultural resources, for the 8,980 miles of railroad in the state, equivalent to 22 trunk lines across its entire length, were built primarily to handle its large agricultural and stock-raising products.

There were 11 establishments engaged in the smelting and refining of zinc in 1900, with 1,487 wage-earners and products valued at \$5,790,144. In 1890, 4 establishments were reported, with 341 wage-earners and products valued at \$963,500. The increase in the value of products during the decade was 500.9 per cent. This industry was reported also in 1890 as a branch of mining. A production of 15,200 short tons of spelter was reported for Kansas for that year, as compared with 54,516 short tons produced in 1900. This remarkable increase is due to the fact that in 1890 the industry was almost in its infancy in this state. Since that date the building of smelting and refining works has gone on rapidly, owing to the presence of zinc ores in the same locality with an abundant supply of fuel—both bituminous coal, and gas from the gas and oil fields opened up in southern Kansas. More than a hundred wells, producing either oil or gas, have been opened during the last few years.

There were 171 establishments in 1900 engaged in the factory manufacture of cheese, butter, and condensed milk, with 395 wage-earners, and products valued at \$3,652,530. In 1890 there were 101 establishments, 271 wage-earners, and products valued at \$919,787. The increase in the value of products during the decade was 297.1 per cent. This industry, which has grown to remarkable proportions during the last decade, constitutes a source of profit to the small farmer and stock raiser as well as to those who operate on a larger scale. Good railroad facilities have made it possible to collect cream from numerous and scattered substations, for the supply of the more centrally located butter and cheese factories. Moreover, many cooperative establishments exist in the state and have attained considerable success.

There were 94 establishments in 1900 engaged in the manufacture of foundry and machine shop products, with 1,246 wage-earners, and products valued at \$2,804,268. In 1890 there were 69 establishments, 1,501 wage-earners, and products valued at \$2,756,825. The increase in the value of products during the decade was 1.7 per cent. A number of manufacturers of flour-mill machinery have located in Kansas City and Leavenworth, and have found a productive and responsive field for their energy and capital.

URBAN MANUFACTURES.

Table 4 shows the totals for the manufacturing and mechanical industries of the cities of Kansas City, Topeka, and Wichita, as returned at the censuses of 1890 and 1900, with the percentages of increase.

¹ Report of the Kansas Bureau of Labor, 1899, pages 330-340.

² Report of the Kansas Bureau of Labor, 1900, page 171.

TABLE 4.—COMPARATIVE SUMMARY, KANSAS CITY, TOPEKA, AND WICHITA, 1890 AND 1900, WITH PER CENT OF INCREASE.

| | Year. | Number of establishments. | Capital. | WAGE-EARNERS | | Miscellaneous expenses. | Cost of materials used. | Value of products, including custom work and repairing. |
|--|-------|---------------------------|--------------|-----------------|--------------|-------------------------|-------------------------|---|
| | | | | Average number. | Total wages. | | | |
| The State..... | 1900 | 7,880 | \$66,827,382 | 35,193 | \$16,917,680 | \$5,241,450 | \$129,485,820 | \$172,129,398 |
| Per cent of increase..... | 1890 | 4,471 | 48,926,002 | 28,287 | 13,288,175 | 5,853,466 | 78,845,167 | 110,219,805 |
| | | 75.1 | 62.1 | 24.6 | 22.8 | 110.5 | 64.2 | 66.2 |
| Kansas City..... | 1900 | 492 | 18,633,475 | 10,544 | 4,885,259 | 2,643,077 | 70,986,491 | \$2,768,948 |
| Per cent of increase..... | 1890 | 234 | 11,629,703 | 6,855 | 3,067,289 | 3,243,969 | 34,236,637 | 44,079,389 |
| | | 110.3 | 60.2 | 53.8 | 33.2 | 118.5 | 105.6 | 87.8 |
| Topeka..... | 1900 | 309 | 8,891,580 | 3,758 | 2,110,721 | 417,231 | 6,023,934 | 9,977,605 |
| Per cent of increase..... | 1890 | 371 | 8,282,899 | 3,044 | 1,579,353 | 276,038 | 3,670,106 | 6,752,449 |
| | | 7.6 | 18.5 | 28.5 | 33.6 | 51.1 | 64.1 | 47.8 |
| Wichita..... | 1900 | 328 | 2,108,524 | 1,505 | 689,271 | 176,146 | 3,060,661 | 4,724,058 |
| Per cent of increase..... | 1890 | 144 | 8,062,096 | 1,445 | 673,994 | 304,458 | 3,890,478 | 5,074,913 |
| | | 127.8 | 181.2 | 4.2 | 15.2 | 142.1 | 19.5 | 16.9 |
| Total for 3 cities..... | 1900 | 1,219 | 24,633,529 | 15,807 | 7,685,251 | 3,236,454 | 79,471,086 | 97,470,616 |
| Per cent of increase..... | 1890 | 749 | 17,975,298 | 11,344 | 5,920,636 | 3,824,465 | 41,287,221 | 55,906,751 |
| | | 62.8 | 87.0 | 39.3 | 29.0 | 115.4 | 92.5 | 74.3 |
| Per cent of 3 cities to total for state..... | 1900 | 15.6 | 36.9 | 44.9 | 46.8 | 61.7 | 61.4 | 66.6 |
| | 1890 | 16.8 | 40.9 | 40.2 | 44.6 | 65.3 | 52.4 | 50.7 |

¹ Decrease.

It appears from Table 4 that there has been a considerable increase during the past decade in the manufactures of the 3 principal cities of the state. The number of establishments increased from 749 to 1,219, or 62.8 per cent; the average number of wage-earners, from 11,344 to 15,807, or 39.3 per cent; and the value of products, from \$55,906,751 to \$97,470,616, or 74.3 per cent. Table 4 indicates, moreover, that the increase, in the last two particulars, was greater in these 3 cities than in the state as a whole. Kansas City, the leading manufacturing city of the state, shows the most rapid growth in value of products, which increased from \$44,079,389 in 1890 to

\$82,768,948 in 1900, or 87.8 per cent. The number of establishments increased during the decade from 234 to 492, or 110.3 per cent, and the number of wage-earners from 6,855 to 10,544, or 53.8 per cent. The number of establishments, number of wage-earners, and value of products for this city in 1900 constituted 6.3, 30, and 48.1 per cent, respectively, of the totals for the entire state.

Table 5 presents the totals for the manufacturing industries of the 36 cities withdrawn from the enumerators, places them in comparison with the totals for the entire state and the state exclusive of these cities and shows their rank in population, and in value of products.

TABLE 5.—URBAN MANUFACTURES.

| | Number of establishments. | Capital. | Proprietors and firm members. | WAGE-EARNERS. | | Miscellaneous expenses. | Cost of materials used. | PRODUCTS. | | | POPULATION. | | |
|---|---------------------------|--------------|-------------------------------|-----------------|--------------|-------------------------|-------------------------|---------------|-------|--------------------|-------------|-------|--------------------|
| | | | | Average number. | Total wages. | | | Value. | Rank. | Per cent of total. | Total. | Rank. | Per cent of total. |
| Total for state | 7,830 | \$66,827,862 | 8,872 | 85,198 | \$16,817,689 | \$5,241,460 | \$129,485,820 | \$172,129,398 | 100.0 | | 11,468,469 | | 100.0 |
| Total for urban manufactures | 3,539 | 50,178,988 | 4,071 | 28,050 | 18,227,812 | 4,519,179 | 112,101,357 | 146,031,011 | 84.8 | | 312,359 | | 21.8 |
| Ablene | 70 | 232,181 | 79 | 192 | 63,251 | 26,587 | 865,596 | 584,619 | 22 | 0.3 | 8,507 | 24 | 0.8 |
| Argentine | 45 | 10,753,128 | 51 | 741 | 436,226 | 118,218 | 15,016,721 | 20,837,170 | 2 | 11.8 | 6,878 | 17 | 0.4 |
| Arkansas City | 74 | 677,649 | 74 | 819 | 151,968 | 68,277 | 725,361 | 1,078,555 | 12 | 0.6 | 6,140 | 15 | 0.4 |
| Atchison | 111 | 1,139,818 | 127 | 881 | 416,816 | 97,926 | 1,699,958 | 2,600,459 | 6 | 1.5 | 15,722 | 5 | 1.1 |
| Chanute | 54 | 98,261 | 65 | 154 | 71,627 | 9,224 | 132,216 | 280,370 | 30 | 0.2 | 4,208 | 22 | 0.3 |
| Chetopa | 30 | 57,296 | 36 | 27 | 9,524 | 3,382 | 71,704 | 112,789 | 36 | 0.1 | 2,019 | 36 | 0.1 |
| Clay Center | 54 | 179,558 | 60 | 71 | 25,311 | 11,809 | 182,221 | 279,283 | 31 | 0.2 | 8,060 | 31 | 0.2 |
| Coffeyville | 61 | 406,444 | 71 | 417 | 148,828 | 42,900 | 697,955 | 1,066,386 | 13 | 0.6 | 4,953 | 19 | 0.8 |
| Concordia | 48 | 98,619 | 56 | 98 | 43,570 | 8,081 | 153,610 | 254,570 | 32 | 0.1 | 3,401 | 27 | 0.2 |
| Emporia | 77 | 232,606 | 89 | 224 | 101,720 | 29,861 | 234,994 | 474,519 | 24 | 0.3 | 8,223 | 11 | 0.6 |
| Fort Scott | 97 | 675,097 | 104 | 585 | 255,808 | 39,630 | 475,668 | 943,018 | 16 | 0.6 | 10,822 | 7 | 0.7 |
| Galena | 61 | 174,028 | 86 | 132 | 92,834 | 12,806 | 378,520 | 563,697 | 20 | 0.3 | 10,155 | 8 | 0.7 |
| Girard | 37 | 123,340 | 47 | 218 | 87,445 | 23,183 | 402,563 | 511,809 | 23 | 0.3 | 2,473 | 85 | 0.2 |
| Hiawatha | 45 | 111,280 | 55 | 84 | 34,256 | 9,468 | 85,822 | 183,816 | 35 | 0.1 | 2,329 | 94 | 0.2 |
| Holtan | 60 | 163,649 | 71 | 104 | 36,847 | 11,021 | 88,039 | 201,585 | 34 | 0.1 | 3,082 | 30 | 0.2 |
| Horton | 40 | 589,952 | 48 | 374 | 196,886 | 12,721 | 291,331 | 555,024 | 21 | 0.3 | 8,898 | 23 | 0.2 |
| Hutchinson | 140 | 1,151,138 | 176 | 703 | 279,188 | 81,740 | 1,216,951 | 1,907,370 | 7 | 1.1 | 9,379 | 10 | 0.7 |
| Independence | 61 | 210,375 | 67 | 133 | 62,658 | 14,490 | 238,555 | 416,991 | 25 | 0.2 | 4,851 | 20 | 0.3 |
| Junction | 66 | 229,677 | 92 | 184 | 88,776 | 13,252 | 449,507 | 652,861 | 18 | 0.4 | 4,695 | 21 | 0.3 |
| Kansas City | 492 | 18,633,475 | 538 | 10,544 | 4,886,259 | 2,643,077 | 70,386,491 | 82,768,943 | 1 | 48.1 | 51,418 | 1 | 3.5 |
| Lawrence | 128 | 875,638 | 138 | 946 | 335,189 | 67,859 | 1,174,357 | 1,842,199 | 8 | 1.1 | 10,862 | 6 | 0.8 |
| Leavenworth | 220 | 3,207,111 | 252 | 1,760 | 638,576 | 252,029 | 2,822,127 | 4,721,378 | 5 | 2.7 | 20,735 | 4 | 1.4 |
| McPherson | 35 | 138,602 | 40 | 67 | 26,410 | 7,279 | 246,630 | 330,714 | 28 | 0.2 | 2,996 | 82 | 0.2 |
| Manhattan | 50 | 126,820 | 60 | 82 | 31,882 | 9,468 | 142,411 | 253,963 | 33 | 0.1 | 3,438 | 26 | 0.2 |
| Newton | 76 | 368,413 | 91 | 404 | 201,415 | 38,761 | 652,370 | 982,475 | 15 | 0.6 | 6,208 | 14 | 0.4 |
| Olathe | 50 | 125,780 | 61 | 140 | 60,676 | 29,456 | 170,356 | 330,098 | 26 | 0.2 | 3,451 | 25 | 0.2 |
| Osawatomie | 29 | 168,468 | 34 | 418 | 250,746 | 6,360 | 356,038 | 649,050 | 19 | 0.4 | 4,191 | 23 | 0.3 |
| Ottawa | 67 | 334,970 | 72 | 341 | 179,651 | 13,789 | 406,584 | 734,965 | 17 | 0.4 | 6,934 | 13 | 0.5 |
| Poela | 50 | 134,660 | 56 | 110 | 38,784 | 16,729 | 223,237 | 331,297 | 27 | 0.2 | 3,144 | 29 | 0.2 |
| Parsons | 83 | 584,706 | 90 | 631 | 292,237 | 34,325 | 531,447 | 1,025,409 | 14 | 0.6 | 7,682 | 12 | 0.5 |
| Pittsburg | 82 | 808,055 | 87 | 994 | 475,772 | 45,654 | 986,823 | 1,616,976 | 9 | 0.9 | 10,112 | 9 | 0.7 |
| Salina | 119 | 634,988 | 134 | 337 | 132,761 | 94,333 | 885,163 | 1,329,985 | 10 | 0.8 | 6,074 | 16 | 0.4 |
| Topeka | 399 | 3,891,530 | 472 | 3,758 | 2,110,721 | 417,231 | 6,023,934 | 9,977,605 | 3 | 5.8 | 33,098 | 2 | 2.3 |
| Weir | 22 | 145,171 | 23 | 123 | 49,686 | 7,967 | 240,614 | 311,634 | 29 | 0.2 | 2,977 | 33 | 0.2 |
| Wichita | 323 | 2,108,524 | 378 | 1,505 | 639,271 | 176,146 | 3,060,661 | 4,724,068 | 4 | 2.7 | 24,671 | 3 | 1.7 |
| Winfield | 75 | 588,481 | 91 | 209 | 86,852 | 24,343 | 893,327 | 1,136,346 | 11 | 0.7 | 5,554 | 18 | 0.4 |
| Total for state exclusive of urban manufactures | 4,291 | 16,648,379 | 4,801 | 7,143 | 3,089,877 | 722,271 | 17,382,963 | 26,098,387 | 15.2 | | 1,156,110 | | 78.7 |
| Per cent of urban manufactures to total for state | 45.2 | 75.1 | 45.9 | 79.7 | 81.1 | 86.2 | 86.6 | 84.8 | | | 21.3 | | |

¹ Exclusive of 2,026 Indians and other persons on Indian reservations, which classes were not included at previous censuses.

Of the 7,830 establishments in the state, 3,539, or 45.2 per cent, were located in these 36 cities. They furnished employment to 28,050 wage-earners, or 79.7 per cent of the total number, and the value of their products, \$146,031,011, formed 84.8 per cent of the total for the state.

Table 6 shows the totals for the state by counties.

Table 7 shows the totals for the state by specified industries.

Table 8 shows the totals for the cities of Kansas City, Leavenworth, Topeka, and Wichita by specified industries.

Table 9 shows the totals for the cities withdrawn from the enumerators, exclusive of those shown in Table 8.

TABLE 6.—MANUFACTURES

[No manufactures reported for

| COUNTIES. | Number of establishments. | CAPITAL. | | | | | Proprietors and firm members. | SALARIED OFFICIALS, CLERKS, ETC. | | AVERAGE NUMBER OF WAGE-EARNERS AND TOTAL WAGES. | |
|----------------------|---------------------------|--------------|-------------|--------------|-----------------------------------|--------------------|-------------------------------|----------------------------------|-------------|---|--------------|
| | | Total. | Land. | Buildings. | Machinery, tools, and implements. | Cash and sundries. | | Number. | Salaries. | Total. | |
| | | | | | | | | | | Average number. | Wages. |
| The State..... | 7,890 | \$66,827,862 | \$5,688,636 | \$15,503,097 | \$17,298,921 | \$28,341,708 | 8,872 | 3,860 | \$1,256,086 | 35,193 | \$10,317,689 |
| 1 Allen..... | 82 | 4,891,863 | 1,648,061 | 1,525,938 | 422,523 | 795,341 | 95 | 39 | 35,120 | 1,041 | 468,506 |
| 2 Anderson..... | 55 | 86,082 | 4,165 | 17,200 | 35,036 | 29,681 | 65 | 2 | 800 | 45 | 15,545 |
| 3 Aitchison..... | 128 | 1,215,499 | 88,000 | 205,090 | 344,211 | 608,198 | 144 | 60 | 46,238 | 935 | 435,988 |
| 4 Barber..... | 38 | 105,509 | 2,085 | 18,525 | 52,615 | 31,684 | 45 | 6 | 2,800 | 45 | 17,132 |
| 5 Barton..... | 69 | 278,924 | 12,080 | 67,730 | 79,705 | 114,409 | 62 | 8 | 5,775 | 85 | 48,838 |
| 6 Bourbon..... | 139 | 833,998 | 188,363 | 119,110 | 327,023 | 249,502 | 157 | 36 | 33,256 | 581 | 273,281 |
| 7 Brown..... | 129 | 770,607 | 36,700 | 197,692 | 97,779 | 438,486 | 153 | 25 | 20,860 | 476 | 237,137 |
| 8 Butler..... | 96 | 229,934 | 9,915 | 42,705 | 114,730 | 62,584 | 102 | 6 | 3,320 | 71 | 28,531 |
| 9 Chase..... | 31 | 76,105 | 2,965 | 22,150 | 27,975 | 28,015 | 31 | 7 | 4,720 | 65 | 45,908 |
| 10 Chautauque..... | 35 | 65,638 | 5,940 | 12,590 | 26,241 | 20,867 | 35 | 1 | 500 | 29 | 12,838 |
| 11 Cherokee..... | 170 | 575,605 | 41,653 | 155,228 | 199,162 | 179,563 | 204 | 18 | 15,643 | 479 | 219,154 |
| 12 Cheyenne..... | 4 | 7,925 | 1,050 | 2,400 | 2,400 | 3,425 | 4 | 4 | | 2 | 1,160 |
| 13 Clark..... | 5 | 4,924 | 100 | 775 | 1,318 | 2,731 | 6 | 6 | | 2 | 500 |
| 14 Clay..... | 93 | 378,163 | 122,238 | 44,400 | 80,619 | 130,881 | 101 | 19 | 16,531 | 117 | 45,346 |
| 15 Cloud..... | 96 | 166,403 | 15,730 | 32,240 | 55,422 | 63,016 | 110 | 4 | 2,620 | 120 | 50,463 |
| 16 Coffey..... | 57 | 213,617 | 18,410 | 60,804 | 67,278 | 67,125 | 67 | 8 | 6,296 | 101 | 36,662 |
| 17 Comanche..... | 8 | 6,260 | 460 | 840 | 2,180 | 2,780 | 8 | 8 | | 4 | 1,160 |
| 18 Cowley..... | 180 | 1,400,334 | 71,803 | 361,998 | 364,902 | 601,631 | 202 | 71 | 59,910 | 611 | 279,158 |
| 19 Crawford..... | 177 | 1,068,761 | 112,982 | 319,730 | 349,430 | 256,619 | 201 | 42 | 32,000 | 1,310 | 603,188 |
| 20 Decatur..... | 25 | 55,095 | 4,730 | 9,030 | 24,175 | 16,560 | 27 | 2 | 2,000 | 22 | 6,415 |
| 21 Dickinson..... | 157 | 718,041 | 98,631 | 170,220 | 175,835 | 278,355 | 161 | 77 | 31,301 | 333 | 158,305 |
| 22 Doniphan..... | 37 | 171,977 | 13,145 | 45,310 | 62,520 | 51,002 | 94 | 5 | 2,570 | 74 | 27,239 |
| 23 Douglas..... | 178 | 947,788 | 51,245 | 196,615 | 354,967 | 344,961 | 192 | 87 | 46,909 | 993 | 352,374 |
| 24 Edwards..... | 22 | 24,165 | 1,600 | 4,700 | 5,635 | 12,230 | 23 | 23 | | 16 | 5,614 |
| 25 Elk..... | 49 | 61,125 | 3,775 | 8,615 | 17,040 | 31,695 | 60 | 2 | 1,200 | 32 | 9,148 |
| 26 Ellis..... | 22 | 136,440 | 1,200 | 27,670 | 50,825 | 56,655 | 22 | 3 | 5,640 | 104 | 58,267 |
| 27 Ellsworth..... | 66 | 289,092 | 19,802 | 71,290 | 117,345 | 80,655 | 65 | 2 | 4,200 | 75 | 37,037 |
| 28 Finney..... | 16 | 27,995 | 590 | 2,760 | 7,550 | 17,095 | 21 | 21 | | 12 | 2,254 |
| 29 Ford..... | 40 | 68,115 | 3,885 | 10,750 | 20,805 | 32,725 | 50 | 7 | 3,280 | 90 | 48,836 |
| 30 Franklin..... | 104 | 410,403 | 42,947 | 108,238 | 179,245 | 79,978 | 109 | 13 | 10,941 | 403 | 199,126 |
| 31 Geary..... | 73 | 241,657 | 18,860 | 69,335 | 63,830 | 89,632 | 101 | 3 | 2,400 | 137 | 84,751 |
| 32 Gove..... | 7 | 4,820 | 145 | 690 | 2,600 | 1,385 | 9 | 9 | | 2 | 450 |
| 33 Graham..... | 4 | 6,000 | 200 | 300 | 3,650 | 1,850 | 7 | 7 | | 3 | 233 |
| 34 Gray..... | 8 | 13,175 | 100 | 2,250 | 3,950 | 875 | 3 | 3 | | 4 | 1,374 |
| 35 Greenwood..... | 37 | 100,512 | 11,600 | 18,790 | 29,136 | 40,986 | 95 | 1 | 364 | 60 | 19,043 |
| 36 Hamilton..... | 7 | 13,720 | 700 | 4,800 | 5,000 | 3,220 | 9 | 9 | | 8 | 2,290 |
| 37 Harper..... | 40 | 103,916 | 1,075 | 19,415 | 38,308 | 44,518 | 45 | 5 | 3,310 | 26 | 11,678 |
| 38 Harvey..... | 119 | 570,579 | 31,135 | 87,820 | 208,334 | 243,290 | 136 | 34 | 23,941 | 450 | 220,354 |
| 39 Hodgeman..... | 3 | 4,800 | 150 | 1,150 | 3,300 | 3,300 | 3 | 3 | | 1 | 200 |
| 40 Jackson..... | 96 | 214,329 | 28,525 | 40,595 | 58,590 | 86,619 | 111 | 13 | 5,280 | 128 | 43,232 |
| 41 Jefferson..... | 78 | 138,739 | 12,770 | 40,580 | 57,870 | 82,519 | 83 | 8 | 2,794 | 86 | 33,619 |
| 42 Jewell..... | 44 | 73,441 | 5,847 | 14,953 | 19,485 | 33,156 | 47 | 47 | | 46 | 17,126 |
| 43 Johnson..... | 78 | 243,218 | 16,389 | 51,600 | 96,175 | 80,063 | 90 | 5 | 2,246 | 167 | 71,821 |
| 44 Kearny..... | 5 | 5,250 | 50 | 150 | 2,075 | 2,975 | 5 | 5 | | 3 | 582 |
| 45 Kingman..... | 35 | 59,415 | 11,050 | 9,650 | 17,310 | 21,405 | 47 | 47 | | 41 | 14,614 |
| 46 Kiowa..... | 7 | 9,785 | 695 | 1,415 | 2,325 | 5,350 | 7 | 7 | | 2 | 600 |
| 47 Labette..... | 172 | 327,114 | 54,060 | 164,880 | 333,923 | 274,251 | 193 | 23 | 25,100 | 747 | 334,894 |
| 48 Leavenworth..... | 247 | 3,288,977 | 224,686 | 535,413 | 720,260 | 1,758,618 | 273 | 237 | 213,961 | 1,771 | 843,100 |
| 49 Lincoln..... | 40 | 123,721 | 10,095 | 28,915 | 35,246 | 49,465 | 43 | 1 | 50 | 28 | 11,134 |
| 50 Linn..... | 71 | 136,030 | 6,905 | 27,065 | 46,755 | 54,305 | 80 | 6 | 4,600 | 67 | 17,838 |
| 51 Logan..... | 3 | 15,700 | 2,000 | 9,300 | 4,400 | 4,400 | 3 | 3 | | 3 | 1,500 |
| 52 Lyon..... | 123 | 353,941 | 18,750 | 61,775 | 178,259 | 99,257 | 143 | 7 | 3,990 | 265 | 118,705 |
| 53 McPherson..... | 104 | 357,384 | 13,315 | 30,205 | 113,057 | 150,807 | 123 | 21 | 13,176 | 167 | 65,702 |
| 54 Marion..... | 98 | 382,129 | 23,230 | 72,954 | 95,897 | 190,048 | 103 | 10 | 4,720 | 143 | 60,923 |
| 55 Marshall..... | 163 | 643,156 | 81,234 | 120,220 | 146,725 | 299,977 | 132 | 20 | 13,203 | 235 | 112,525 |
| 56 Meade..... | 4 | 2,900 | 200 | 2,475 | 225 | 225 | 4 | 4 | | 2 | 200 |
| 57 Miami..... | 100 | 335,414 | 41,251 | 44,505 | 115,993 | 133,665 | 112 | 20 | 16,376 | 548 | 297,145 |
| 58 Mitchell..... | 69 | 313,249 | 51,175 | 68,000 | 113,419 | 80,055 | 77 | 16 | 3,945 | 148 | 48,998 |
| 59 Montgomery..... | 193 | 1,470,958 | 89,076 | 614,636 | 333,997 | 438,199 | 217 | 51 | 51,002 | 849 | 343,232 |
| 60 Morris..... | 41 | 65,001 | 4,130 | 16,450 | 23,800 | 21,121 | 44 | 3 | 1,920 | 37 | 16,837 |
| 61 Nemaha..... | 107 | 144,753 | 13,100 | 32,730 | 45,983 | 52,830 | 119 | 2 | 940 | 85 | 30,463 |
| 62 Neosho..... | 112 | 213,981 | 33,511 | 32,720 | 80,420 | 67,330 | 135 | 6 | 5,100 | 194 | 82,440 |
| 63 Ness..... | 14 | 9,931 | 337 | 2,415 | 3,335 | 2,394 | 15 | 15 | | 6 | 1,735 |
| 64 Norton..... | 50 | 92,384 | 8,425 | 19,150 | 36,637 | 28,722 | 58 | 58 | | 34 | 14,036 |
| 65 Osage..... | 116 | 173,163 | 9,424 | 39,175 | 63,055 | 61,509 | 135 | 9 | 3,100 | 135 | 43,561 |
| 66 Osborne..... | 35 | 96,017 | 3,330 | 19,580 | 40,920 | 27,187 | 39 | 1 | 75 | 33 | 13,315 |
| 67 Ottawa..... | 73 | 173,270 | 17,280 | 37,510 | 66,760 | 53,720 | 91 | 1 | 750 | 96 | 37,233 |
| 68 Pawnee..... | 34 | 103,235 | 6,075 | 25,850 | 41,320 | 35,390 | 40 | 1 | 1,200 | 61 | 25,705 |
| 69 Phillips..... | 51 | 112,814 | 13,770 | 20,036 | 46,008 | 32,400 | 63 | 63 | | 81 | 38,611 |
| 70 Pottawatomie..... | 37 | 173,746 | 20,110 | 35,325 | 63,171 | 55,139 | 95 | 2 | 600 | 67 | 25,345 |
| 71 Pratt..... | 17 | 36,118 | 2,975 | 5,980 | 12,355 | 14,808 | 18 | 2 | 1,440 | 13 | 5,572 |
| 72 Reno..... | 200 | 1,299,247 | 39,651 | 356,610 | 419,658 | 433,328 | 243 | 52 | 36,166 | 737 | 294,631 |
| 73 Republic..... | 33 | 104,713 | 6,665 | 23,335 | 31,865 | 42,248 | 104 | 104 | | 72 | 21,185 |
| 74 Rice..... | 77 | 241,173 | 13,625 | 47,900 | 55,818 | 33,835 | 87 | 9 | 12,680 | 147 | 54,008 |
| 75 Riley..... | 91 | 219,253 | 24,655 | 64,705 | 78,123 | 66,765 | 108 | 8 | 4,770 | 124 | 47,531 |

BY COUNTIES: 1900.

Morton and Stanton counties.]

| AVERAGE NUMBER OF WAGE-EARNERS AND TOTAL WAGES—continued. | | | | | | MISCELLANEOUS EXPENSES. | | | | | COST OF MATERIALS USED. | | | Value of products, including custom work and repairing. | |
|---|--------------|---------------------------|-----------|---------------------------|-----------|-------------------------|----------------|--|---------------------------------|----------------|-------------------------|---|----------------------------------|---|----|
| Men, 16 years and over. | | Women, 16 years and over. | | Children, under 16 years. | | Total. | Rent of works. | Taxes, not including internal revenue. | Rent of offices, interest, etc. | Contract work. | Total. | Principal materials, including mill supplies and freight. | Fuel and rent of power and heat. | | |
| Average number. | Wages. | Average number. | Wages. | Average number. | Wages. | | | | | | | | | | |
| 31,171 | \$15,444,390 | 3,162 | \$743,886 | 860 | \$129,413 | \$5,241,450 | \$578,022 | \$400,702 | \$3,922,668 | \$340,058 | \$129,485,320 | \$127,675,781 | \$1,809,589 | \$172,129,398 | 1 |
| 1,013 | 462,299 | 21 | 5,008 | 10 | 1,199 | 42,415 | 4,480 | 7,968 | 29,067 | 950 | 2,968,754 | 2,835,210 | 133,535 | 3,697,306 | 2 |
| 38 | 14,461 | 2 | 384 | 5 | 700 | 5,889 | 2,309 | 519 | 3,061 | | 94,981 | 93,012 | 1,969 | 158,829 | 3 |
| 777 | 401,281 | 146 | 30,162 | 12 | 1,540 | 100,003 | 17,256 | 8,145 | 69,602 | 5,000 | 2,052,203 | 2,007,117 | 45,086 | 3,083,736 | 4 |
| 40 | 16,238 | 5 | 894 | | | 3,838 | 1,706 | 374 | 1,758 | | 56,768 | 52,954 | 3,814 | 112,987 | 5 |
| 78 | 41,748 | 6 | 1,756 | 1 | 394 | 16,088 | 3,536 | 1,480 | 9,882 | 185 | 886,540 | 377,603 | 8,937 | 550,450 | 6 |
| 514 | 257,225 | 65 | 15,814 | 2 | 245 | 48,542 | 10,399 | 4,593 | 27,678 | 5,982 | 514,373 | 500,007 | 14,366 | 1,039,816 | 7 |
| 438 | 229,299 | 32 | 7,283 | 6 | 555 | 25,024 | 6,478 | 8,021 | 7,486 | 2,439 | 440,892 | 430,170 | 10,722 | 839,977 | 8 |
| 56 | 20,359 | 13 | 3,003 | 2 | 172 | 10,703 | 3,612 | 1,506 | 5,535 | | 132,600 | 128,394 | 4,206 | 238,069 | 9 |
| 63 | 45,487 | 2 | 421 | | | 3,288 | 1,936 | 504 | 518 | 800 | 60,727 | 58,193 | 2,529 | 146,328 | 10 |
| 29 | 12,383 | | | | | 2,416 | 824 | 522 | 1,070 | | 70,979 | 68,721 | 2,258 | 112,808 | 11 |
| 481 | 210,267 | 88 | 7,631 | 10 | 1,256 | 48,014 | 9,751 | 4,872 | 33,091 | 800 | 972,699 | 941,152 | 31,547 | 1,457,142 | 12 |
| 1 | 500 | | | 1 | 75 | 238 | 85 | 45 | 108 | | 2,250 | 2,187 | 63 | 6,935 | 13 |
| 2 | 500 | | | | | 241 | 144 | 34 | 63 | | 1,063 | 1,785 | 178 | 4,946 | 14 |
| 92 | 40,901 | 20 | 3,838 | 5 | 607 | 25,127 | 5,111 | 2,241 | 17,475 | 300 | 359,946 | 342,848 | 17,103 | 567,055 | 15 |
| 98 | 47,058 | 15 | 2,601 | 7 | 804 | 11,175 | 4,223 | 1,194 | 5,768 | | 235,394 | 229,596 | 5,798 | 379,858 | 16 |
| 74 | 81,358 | 27 | 5,304 | | | 10,307 | 2,612 | 1,691 | 6,104 | | 221,895 | 217,946 | 3,949 | 346,510 | 17 |
| 4 | 1,160 | | | | | 276 | 211 | 26 | 39 | | 3,477 | 3,204 | 273 | 8,565 | 18 |
| 557 | 287,615 | 40 | 10,121 | 14 | 1,422 | 96,344 | 13,043 | 14,585 | 68,676 | 40 | 1,697,304 | 1,656,938 | 40,366 | 2,402,579 | 19 |
| 1,227 | 586,688 | 64 | 14,390 | 19 | 2,110 | 76,717 | 17,953 | 10,051 | 47,388 | 375 | 1,629,559 | 1,537,207 | 92,352 | 2,448,488 | 20 |
| 15 | 5,235 | 5 | 1,030 | 2 | 150 | 1,910 | 279 | 226 | 1,305 | 100 | 57,872 | 55,503 | 2,369 | 88,569 | 21 |
| 344 | 151,842 | 29 | 5,003 | 10 | 1,460 | 52,232 | 4,993 | 5,039 | 41,050 | 1,150 | 1,280,181 | 1,257,299 | 22,882 | 1,677,969 | 22 |
| 66 | 26,504 | 3 | 249 | 5 | 483 | 7,379 | 2,330 | 1,102 | 2,102 | 1,785 | 122,807 | 118,614 | 3,693 | 220,915 | 23 |
| 813 | 315,960 | 164 | 34,538 | 16 | 1,876 | 74,873 | 13,659 | 7,517 | 45,882 | 3,085 | 1,275,453 | 1,242,761 | 32,692 | 2,003,029 | 24 |
| 14 | 5,354 | 1 | 140 | 1 | 120 | 1,784 | 1,010 | 215 | 559 | | 18,819 | 18,139 | 680 | 86,890 | 25 |
| 25 | 8,177 | 1 | 282 | 6 | 689 | 4,490 | 2,034 | 358 | 1,908 | 190 | 80,496 | 79,516 | 980 | 129,608 | 26 |
| 98 | 57,162 | 2 | 434 | 4 | 671 | 8,069 | 651 | 1,207 | 1,231 | | 237,925 | 232,425 | 5,500 | 338,874 | 27 |
| 70 | 35,288 | 4 | 1,074 | 1 | 75 | 14,851 | 1,837 | 2,275 | 6,275 | 4,000 | 129,721 | 123,125 | 6,696 | 214,900 | 28 |
| 3 | 1,160 | 4 | 695 | 5 | 409 | 2,403 | 837 | 230 | 1,236 | | 15,305 | 14,585 | 720 | 30,635 | 29 |
| 82 | 46,076 | 6 | 1,950 | 2 | 360 | 3,890 | 2,404 | 361 | 812 | 283 | 173,143 | 171,481 | 1,712 | 268,017 | 30 |
| 352 | 189,721 | 39 | 8,380 | 12 | 1,025 | 18,945 | 7,285 | 3,490 | 7,855 | 315 | 438,566 | 478,941 | 9,625 | 879,632 | 31 |
| 148 | 78,436 | 30 | 5,388 | 9 | 927 | 13,397 | 5,165 | 1,733 | 6,099 | 400 | 465,526 | 462,032 | 3,494 | 676,488 | 32 |
| 1 | 300 | | | 1 | 150 | 166 | 75 | 35 | 55 | | 2,034 | 1,785 | 249 | 7,025 | 33 |
| 3 | 1,218 | 1 | 156 | | 238 | 186 | 100 | 22 | 64 | | 2,035 | 1,798 | 242 | 7,450 | 34 |
| 46 | 10,811 | 10 | 1,595 | 5 | 637 | 114 | 62 | 19 | 33 | | 5,947 | 5,717 | 230 | 9,720 | 35 |
| 4 | 1,600 | | | 3 | 690 | 7,805 | 4,258 | 733 | 2,279 | 536 | 103,558 | 99,693 | 3,860 | 183,962 | 36 |
| 21 | 10,926 | 2 | 425 | 4 | 327 | 581 | 128 | 237 | 216 | | 26,719 | 26,189 | 580 | 39,250 | 37 |
| 417 | 213,909 | 32 | 6,800 | 1 | 145 | 6,111 | 1,453 | 920 | 3,720 | 18 | 163,418 | 161,171 | 2,242 | 223,770 | 38 |
| 96 | 38,620 | 24 | 4,409 | 3 | 253 | 47,177 | 8,765 | 5,488 | 20,073 | 12,901 | 1,033,939 | 1,013,340 | 20,599 | 1,453,939 | 39 |
| 68 | 20,729 | 13 | 3,480 | 5 | 460 | 125 | 58 | 42 | 25 | | 4,502 | 4,267 | 235 | 6,570 | 40 |
| 31 | 13,797 | 13 | 3,080 | 2 | 249 | 12,774 | 4,027 | 1,481 | 6,149 | 1,117 | 166,121 | 162,099 | 4,022 | 316,771 | 41 |
| 184 | 63,466 | 20 | 6,480 | 13 | 1,875 | 29,180 | 2,069 | 1,124 | 25,987 | | 835,705 | 332,799 | 2,906 | 506,156 | 42 |
| 1 | 432 | | | 2 | 150 | 3,431 | 1,209 | 434 | 1,578 | 150 | 45,798 | 44,027 | 1,771 | 104,992 | 43 |
| 31 | 12,800 | 9 | 1,664 | 1 | 150 | 33,805 | 4,413 | 1,974 | 10,429 | 17,050 | 342,672 | 334,753 | 7,919 | 564,213 | 44 |
| 1 | 450 | | | 2 | 202 | 134 | 73 | 114 | 114 | | 1,460 | 1,285 | 175 | 5,175 | 45 |
| 661 | 321,248 | 66 | 11,350 | 20 | 2,296 | 8,076 | 1,786 | 877 | 918 | | 74,107 | 73,457 | 650 | 130,852 | 46 |
| 1,574 | 805,446 | 142 | 30,310 | 55 | 7,344 | 202 | 25 | 88 | 79 | 10 | 3,524 | 3,362 | 162 | 9,068 | 47 |
| 18 | 8,655 | 7 | 2,029 | 3 | 500 | 50,134 | 14,929 | 6,818 | 28,810 | 77 | 1,091,044 | 1,069,705 | 21,339 | 1,726,107 | 48 |
| 88 | 13,892 | 16 | 2,381 | 13 | 1,615 | 286,632 | 32,998 | 36,419 | 140,218 | 47,057 | 2,898,713 | 2,844,807 | 53,906 | 4,584,296 | 49 |
| 3 | 1,500 | | | 18 | 1,615 | 5,302 | 930 | 354 | 1,878 | 1,560 | 81,940 | 79,745 | 2,195 | 130,902 | 50 |
| 227 | 109,704 | 31 | 8,290 | 7 | 711 | 7,037 | 2,314 | 1,272 | 3,426 | 25 | 232,772 | 229,006 | 3,766 | 323,783 | 51 |
| 135 | 62,268 | 16 | 2,657 | 6 | 777 | 695 | 194 | 33 | 468 | | 23,170 | 22,420 | 750 | 27,610 | 52 |
| 129 | 58,699 | 9 | 1,591 | 5 | 638 | 34,401 | 10,705 | 3,114 | 14,637 | 6,545 | 393,085 | 384,215 | 8,870 | 698,350 | 53 |
| 219 | 97,558 | 52 | 13,489 | 14 | 1,478 | 26,532 | 4,087 | 2,549 | 19,694 | 202 | 671,007 | 655,234 | 15,773 | 886,817 | 54 |
| 518 | 292,495 | 28 | 4,479 | 2 | 200 | 12,156 | 3,410 | 1,731 | 7,015 | | 980,769 | 874,359 | 6,406 | 674,483 | 55 |
| 132 | 46,175 | 9 | 2,100 | 7 | 723 | 53,237 | 10,416 | 2,977 | 31,669 | 5,175 | 413,515 | 402,869 | 11,016 | 771,967 | 56 |
| 726 | 820,032 | 94 | 20,403 | 29 | 2,847 | 190 | 102 | 52 | 86 | | 1,841 | 1,784 | 57 | 4,555 | 57 |
| 33 | 16,361 | 2 | 400 | 2 | 76 | 24,365 | 6,403 | 3,817 | 13,869 | 275 | 602,888 | 594,177 | 8,711 | 1,023,871 | 58 |
| 64 | 25,934 | 15 | 3,794 | 6 | 735 | 18,037 | 4,528 | 2,298 | 11,301 | | 492,765 | 476,952 | 15,813 | 667,712 | 59 |
| 153 | 72,710 | 35 | 8,934 | 6 | 796 | 97,503 | 11,006 | 8,074 | 72,033 | 6,340 | 1,713,851 | 1,665,243 | 48,608 | 2,546,879 | 60 |
| 4 | 1,435 | 1 | 100 | 1 | 200 | 2,992 | 1,883 | 637 | 837 | 135 | 60,886 | 58,129 | 2,257 | 108,458 | 61 |
| 29 | 13,101 | 4 | 818 | 1 | 167 | 4,178 | 4,623 | 910 | 2,620 | 25 | 120,455 | 116,833 | 3,622 | 213,875 | 62 |
| 113 | 38,859 | 18 | 4,033 | 4 | 699 | 14,609 | 5,773 | 1,412 | 6,774 | 650 | 222,005 | 218,059 | 3,946 | 404,491 | 63 |
| 28 | 12,315 | 3 | 550 | 2 | 450 | 140 | 140 | 131 | 122 | 30 | 6,165 | 5,837 | 328 | 11,061 | 64 |
| 74 | 32,401 | 20 | 4,312 | 2 | 525 | 8,114 | 4,178 | 1,150 | 682 | | 86,617 | 83,846 | 2,771 | 143,582 | 65 |
| 54 | 23,745 | 7 | 1,960 | | | 10,822 | 3,526 | 1,313 | 5,000 | 718 | 202,193 | 197,282 | 4,911 | 351,992 | 66 |
| 76 | 37,255 | 3 | 653 | 2 | 698 | 190 | 102 | 52 | 86 | | 89,966 | 88,261 | 1,705 | 141,327 | 67 |
| 60 | 23,705 | 5 | 1,488 | 2 | 152 | 11,031 | 3,403 | 1,265 | 3,263 | 8,100 | 224,448 | 220,902 | 3,546 | 361,985 | 68 |
| 11 | 5,272 | 1 | 200 | 1 | 100 | 4,917 | 963 | 1,131 | 2,823 | | 165,495 | 161,482 | 4,013 | 241,109 | 69 |
| 648 | 275,420 | 36 | 18,850 | 3 | 411 | 3,553 | 1,681 | 673 | 1,147 | 97 | 132,770 | 128,677 | 3,693 | 231,628 | 70 |
| 47 | 18,189 | 21 | 2,396 | 4 | 600 | 9,724 | 3,716 | 1,207 | 4,310 | 491 | 157,058 | 153,873 | 3, | | |

TABLE 6.—MANUFACTURES

| COUNTIES AND MANUFACTURING AND MECHANICAL INDUSTRIES. | Number of establishments. | CAPITAL. | | | | | Proprietors and firm members. | SALARIED OFFICIALS, CLERKS, ETC. | | AVERAGE NUMBER OF WAGE-EARNERS AND TOTAL WAGES. | |
|---|---------------------------|------------|-----------|------------|------------------------------------|--------------------|-------------------------------|----------------------------------|-----------|---|-----------|
| | | Total. | Land. | Buildings. | Machinery, tools, and imple-ments. | Cash and sundries. | | Number. | Salaries. | Total. | |
| | | | | | | | | | | Average number. | Wages. |
| 77 Rooks | 34 | \$64,840 | \$4,380 | \$19,480 | \$20,230 | \$20,800 | 35 | | 28 | \$9,341 | |
| 78 Rush | 20 | 47,720 | 2,015 | 11,950 | 21,115 | 12,640 | 24 | \$135 | 12 | 3,745 | |
| 79 Russell | 36 | 92,512 | 2,905 | 20,680 | 30,674 | 33,103 | 39 | 680 | 19 | 8,225 | |
| 80 Saline | 145 | 740,543 | 57,545 | 219,308 | 182,789 | 286,901 | 164 | 60 | 357 | 141,310 | |
| 81 Scott | 3 | 2,485 | 10 | 50 | 2,150 | 225 | 3 | | 8 | 770 | |
| 82 Sedgwick | 377 | 2,197,772 | 208,295 | 419,583 | 742,651 | 827,243 | 429 | 152 | 119,280 | 1,514 | 653,175 |
| 83 Seward | 9 | 8,339 | 92 | 301 | 2,441 | 1,005 | 15 | | 4 | 1,174 | |
| 84 Shawnee | 440 | 4,083,989 | 226,586 | 911,353 | 1,876,495 | 1,569,505 | 511 | 330 | 212,730 | 3,936 | 2,181,463 |
| 85 Sheridan | 9 | 13,416 | 280 | 2,360 | 7,476 | 2,800 | 9 | | 6 | 2,631 | |
| 86 Sherman | 8 | 55,474 | 580 | 40,628 | 7,025 | 7,241 | 6 | 5 | 4,416 | 56 | 33,391 |
| 87 Smith | 60 | 126,647 | 9,133 | 27,124 | 55,905 | 34,485 | 67 | 1 | 900 | 53 | 21,146 |
| 88 Stafford | 38 | 90,840 | 3,485 | 19,735 | 25,250 | 41,870 | 45 | 2 | 1,450 | 35 | 13,023 |
| 89 Sumner | 148 | 510,142 | 20,330 | 126,960 | 168,411 | 191,441 | 163 | 22 | 22,142 | 281 | 124,343 |
| 90 Thomas | 16 | 26,278 | 2,010 | 9,315 | 3,300 | 6,653 | 16 | | 17 | 6,137 | |
| 91 Wabauusee | 89 | 116,892 | 10,059 | 23,080 | 35,590 | 47,163 | 102 | 5 | 2,816 | 58 | 19,453 |
| 92 Washington | 104 | 156,515. | 12,800 | 41,662 | 44,455 | 57,598 | 125 | | 75 | 25,639 | |
| 93 Wilson | 55 | 840,682 | 13,145 | 56,395 | 159,272 | 111,870 | 61 | 6 | 5,560 | 112 | 47,367 |
| 94 Woodson | 40 | 74,610 | 2,940 | 15,030 | 29,575 | 26,405 | 48 | 2 | 480 | 35 | 12,405 |
| 95 Wyandotte | 568 | 29,848,694 | 1,506,309 | 6,635,233 | 6,691,874 | 15,014,778 | 621 | 2,144 | 1,962,954 | 12,084 | 5,765,884 |
| 96 All other counties ¹ | 12 | 35,037 | 845 | 5,545 | 15,825 | 12,822 | 15 | | 8 | 2,325 | |

¹ Includes establishments distributed as follows: Grant, 1; Greeley, 1; Haskell, 2; Lane, 1; Rawlins, 1; Stevens, 1; Trego, 2; Wallace, 1; Wichita, 2.

TABLE 7.—MANUFACTURES BY

| | 7,830 | \$66,827,862 | \$5,683,636 | \$15,503,007 | \$17,298,921 | \$23,341,708 | 8,872 | 8,860 | \$3,256,086 | 35,193 | \$16,317,689 |
|---|-------|--------------|-------------|--------------|--------------|--------------|-------|-------|-------------|--------|--------------|
| 1 All industries | 7,830 | \$66,827,862 | \$5,683,636 | \$15,503,007 | \$17,298,921 | \$23,341,708 | 8,872 | 8,860 | \$3,256,086 | 35,193 | \$16,317,689 |
| 2 Agricultural implements | 4 | 19,750 | 400 | 1,500 | 3,850 | 14,000 | 10 | 6 | 1,075 | 11 | 2,460 |
| 3 Awnings, tents, and sails | 7 | 6,045 | | | 1,825 | 4,220 | 7 | 8 | 1,800 | 14 | 4,776 |
| 4 Baking and yeast powders | 5 | 7,785 | 10 | 250 | 1,200 | 6,325 | 7 | 2 | 1,200 | 11 | 3,530 |
| 5 Bicycle and tricycle repairing | 62 | 80,639 | 1,750 | 6,925 | 32,855 | 39,329 | 76 | 1 | 468 | 52 | 29,538 |
| 6 Blacksmithing and wheelwrighting | 1,414 | 1,267,070 | 172,018 | 323,927 | 325,733 | 435,318 | 1,624 | 2 | 750 | 618 | 255,082 |
| 7 Boots and shoes, custom work and repairing | 297 | 110,225 | 12,440 | 21,133 | 32,237 | 44,410 | 304 | 1 | 300 | 76 | 32,084 |
| 8 Bottling | 4 | 18,500 | 1,600 | 5,000 | 4,400 | 7,500 | 6 | 4 | 2,150 | 12 | 5,500 |
| 9 Boxes, wooden packing | 9 | 229,655 | 22,600 | 48,900 | 73,875 | 78,280 | 8 | 17 | 11,610 | 264 | 88,850 |
| 10 Bread and other bakery products | 174 | 324,999 | 47,905 | 113,870 | 71,757 | 91,467 | 187 | 42 | 16,180 | 380 | 139,014 |
| 11 Brick and tile | 57 | 754,710 | 36,513 | 220,186 | 251,944 | 186,067 | 67 | 49 | 29,134 | 905 | 314,330 |
| 12 Bridges | 3 | 126,450 | | | 25,450 | 101,000 | 3 | 10 | 16,200 | 203 | 124,050 |
| 13 Brooms and brushes | 62 | 72,554 | 6,780 | 17,942 | 10,510 | 37,322 | 3 | 11 | 6,595 | 115 | 39,733 |
| 14 Carpentering | 475 | 559,785 | 52,529 | 76,955 | 117,658 | 313,643 | 509 | 50 | 21,715 | 1,760 | 844,573 |
| 15 Carpets, rag | 32 | 11,520 | 2,117 | 4,453 | 3,059 | 1,891 | 32 | | | 7 | 1,428 |
| 16 Carriages and wagons | 73 | 271,122 | 29,785 | 55,510 | 44,125 | 141,702 | 91 | 21 | 12,830 | 239 | 102,276 |
| 17 Cars and general shop construction and repairs by steam railroad companies | 37 | 2,931,699 | 358,213 | 853,770 | 861,867 | 857,840 | | 175 | 167,736 | 5,592 | 3,476,400 |
| 18 Cheese, butter, and condensed milk, factory product | 171 | 1,139,595 | 41,280 | 366,271 | 492,663 | 239,381 | 106 | 97 | 40,908 | 395 | 167,293 |
| 19 Clothing, men's, custom work and repairing | 250 | 304,268 | 17,710 | 52,250 | 35,709 | 198,599 | 277 | 7 | 6,620 | 575 | 252,189 |
| 20 Clothing, men's, factory product | 3 | 93,809 | 1,500 | 1,500 | 5,750 | 55,059 | 5 | 10 | 4,977 | 101 | 18,989 |
| 21 Clothing, women's, dressmaking | 130 | 47,776 | 5,650 | 13,775 | 10,635 | 17,716 | 147 | 1 | 275 | 323 | 64,936 |
| 22 Coke | 8 | 44,267 | 400 | 1,057 | 38,594 | 4,276 | 4 | 4 | 2,920 | 28 | 11,425 |
| 23 Confectionery | 61 | 126,621 | 12,800 | 25,000 | 49,033 | 39,788 | 70 | 14 | 10,700 | 155 | 46,194 |
| 24 Coopersage | 14 | 186,661 | 27,950 | 18,450 | 23,949 | 111,312 | 13 | 8 | 5,088 | 223 | 95,574 |
| 25 Druggists' preparations, not including prescriptions | 14 | 22,220 | 2,000 | 4,500 | 2,770 | 12,950 | 16 | | 1,000 | 10 | 3,580 |
| 26 Dyeing and cleaning | 12 | 8,422 | 2,500 | 1,800 | 1,695 | 2,427 | 12 | | | 11 | 4,366 |
| 27 Electrical construction and repairs | 4 | 129,822 | | | 5,698 | 124,124 | 3 | 7 | 2,895 | 21 | 11,169 |
| 28 Fertilizers | 3 | 229,733 | 19,000 | 66,450 | 44,448 | 99,835 | 1 | 5 | 6,300 | 155 | 70,832 |
| 29 Flouring and grist mill products | 633 | 8,366,966 | 625,680 | 1,915,743 | 2,702,193 | 3,123,350 | 639 | 231 | 267,737 | 1,451 | 743,462 |
| 30 Food preparations | 5 | 8,100 | | | 3,300 | 4,800 | 5 | 8 | 3,570 | 14 | 4,058 |
| 31 Foundry and machine shop products | 94 | 2,450,324 | 205,385 | 497,952 | 654,256 | 1,192,731 | 105 | 117 | 122,323 | 1,246 | 716,633 |
| 32 Fruits and vegetables, canning and preserving | 5 | 30,300 | 4,200 | 10,702 | 8,766 | 6,632 | 2 | 11 | 3,254 | 116 | 17,143 |
| 33 Furniture, cabinetmaking, repairing, and upholstering | 63 | 197,540 | 33,790 | 91,100 | 29,580 | 38,070 | 75 | 1 | 180 | 40 | 14,321 |
| 34 Furniture, factory product | 10 | 212,931 | 9,526 | 32,628 | 51,408 | 149,369 | 10 | 30 | 21,532 | 220 | 72,949 |
| 35 Gas, illuminating and heating | 17 | 1,414,636 | 123,657 | 137,872 | 1,012,067 | 141,240 | | 50 | 25,595 | 85 | 43,562 |
| 36 Gas machines and meters | 3 | 6,000 | | 500 | 950 | 4,550 | 4 | | | 3 | 1,560 |
| 37 Hand stamps | 3 | 3,250 | | | 1,700 | 1,550 | 3 | | | 5 | 2,464 |
| 38 Ice, artificial | 19 | 425,199 | 24,870 | 68,500 | 295,779 | 86,050 | 18 | 20 | 13,420 | 114 | 55,427 |
| 39 Lime and cement | 13 | 617,191 | 185,532 | 87,133 | 159,943 | 184,583 | 4 | 39 | 36,543 | 167 | 69,727 |
| 40 Lock and gun smithing | 39 | 35,975 | 2,050 | 6,025 | 11,900 | 16,000 | 41 | | | 14 | 5,235 |
| 41 Looking-glass and picture frames | 13 | 17,465 | 300 | 300 | 2,120 | 14,745 | 12 | | | 10 | 4,280 |
| 42 Lumber and timber products | 54 | 85,194 | 19,841 | 4,760 | 47,978 | 12,615 | 63 | | | 76 | 22,897 |
| 43 Lumber, planing mill products, including sash, doors, and blinds | 28 | 314,265 | 33,850 | 55,400 | 103,350 | 146,605 | 32 | 19 | 14,340 | 297 | 134,371 |
| 44 Marble and stone work | 40 | 158,330 | 27,695 | 17,920 | 57,345 | 55,920 | 49 | 17 | 11,550 | 264 | 141,976 |
| 45 Masonry, brick and stone | 97 | 150,148 | 14,090 | 18,385 | 19,595 | 98,078 | 113 | | | 602 | 315,841 |
| 46 Mattresses and spring beds | 13 | 60,254 | 3,200 | 4,100 | 13,363 | 39,591 | 14 | 10 | 6,245 | 82 | 29,433 |

BY COUNTIES: 1900—Continued.

| AVERAGE NUMBER OF WAGE-EARNERS AND TOTAL WAGES—continued. | | | | | | MISCELLANEOUS EXPENSES. | | | | | COST OF MATERIALS USED. | | | Value of products, including custom work and repairing. | |
|---|-----------|---------------------------|---------|---------------------------|--------|-------------------------|----------------|--|---------------------------------|----------------|-------------------------|---|----------------------------------|---|----|
| Men, 16 years and over. | | Women, 16 years and over. | | Children, under 16 years. | | Total. | Rent of works. | Taxes, not including internal revenue. | Rent of offices, interest, etc. | Contract work. | Total. | Principal materials, including mill supplies and freight. | Fuel and rent of power and heat. | | |
| Average number. | Wages. | Average number. | Wages. | Average number. | Wages. | | | | | | | | | | |
| 28 | \$8,737 | 4 | \$508 | 1 | \$86 | \$2,158 | \$908 | \$500 | \$750 | | \$110,005 | \$107,023 | \$2,977 | \$172,225 | 77 |
| 9 | 3,120 | 1 | 455 | 2 | 170 | 1,389 | 275 | 210 | 372 | \$532 | 31,949 | 30,507 | 1,832 | 54,105 | 78 |
| 17 | 7,704 | 2 | 521 | | | 3,443 | 563 | 670 | 1,910 | 300 | 60,529 | 53,191 | 2,338 | 100,588 | 79 |
| 287 | 127,434 | 57 | 12,160 | 13 | 1,730 | 96,688 | 10,280 | \$,690 | 65,816 | 17,382 | 995,790 | 977,186 | 18,604 | 1,476,081 | 80 |
| 2 | 520 | 1 | 250 | | | 158 | 71 | 12 | 75 | | 626 | 544 | 82 | 3,200 | 81 |
| 1,318 | 605,762 | 202 | 43,880 | 24 | 4,033 | 184,310 | 50,159 | 11,256 | 85,220 | 37,675 | 3,098,757 | 3,045,070 | 53,687 | 4,841,815 | 82 |
| 3 | 984 | | | 1 | 180 | 573 | 320 | 78 | 180 | | 12,015 | 12,138 | 417 | 22,200 | 83 |
| 3,548 | 2,001,174 | 356 | 86,128 | 32 | 4,161 | 424,311 | 68,766 | 34,301 | 247,256 | 73,938 | 6,198,363 | 6,050,563 | 137,800 | 10,318,563 | 84 |
| 6 | 2,631 | | | | | 667 | 142 | 113 | 412 | | 18,439 | 17,319 | 820 | 30,620 | 85 |
| 56 | 33,391 | | | | | 1,136 | 120 | 785 | 231 | | 67,574 | 63,637 | 3,937 | 112,631 | 86 |
| 33 | 18,422 | 11 | 2,232 | 4 | 492 | 4,225 | 1,805 | 997 | 1,905 | 18 | 191,298 | 183,121 | 3,177 | 296,765 | 87 |
| 30 | 11,755 | 5 | 1,273 | | | 2,472 | 722 | 589 | 896 | 265 | 202,727 | 197,908 | 4,819 | 252,694 | 88 |
| 236 | 115,891 | 33 | 7,599 | 7 | 853 | 40,456 | 8,060 | 3,976 | 26,733 | 1,687 | 872,831 | 849,101 | 23,730 | 1,237,042 | 89 |
| 17 | 6,187 | | | | | 1,251 | 517 | 201 | 538 | | 35,565 | 33,654 | 1,911 | 58,968 | 90 |
| 50 | 18,378 | 6 | 830 | 2 | 250 | 5,597 | 1,854 | 760 | 2,323 | 160 | 123,704 | 123,912 | 2,792 | 222,562 | 91 |
| 65 | 22,898 | 9 | 2,401 | 1 | 340 | 7,991 | 2,697 | 1,037 | 4,106 | 151 | 148,239 | 145,573 | 2,666 | 278,935 | 92 |
| 101 | 45,970 | 7 | 1,363 | 4 | 534 | 27,426 | 1,251 | 2,303 | 23,321 | 21 | 235,651 | 218,732 | 16,919 | 330,029 | 93 |
| 30 | 11,609 | 4 | 571 | 1 | 225 | 4,142 | 1,301 | 740 | 2,077 | 24 | 84,661 | 83,207 | 1,454 | 131,863 | 94 |
| 10,908 | 5,466,828 | 823 | 233,045 | 353 | 66,011 | 2,785,044 | 90,948 | 139,554 | 2,479,425 | 75,117 | 85,836,500 | 83,246,813 | 589,687 | 104,083,058 | 95 |
| 2 | 1,300 | 2 | 440 | 4 | 585 | 1,045 | 236 | 243 | 566 | | 61,235 | 59,508 | 1,727 | 76,862 | 96 |

SPECIFIED INDUSTRIES: 1900.

| \$1,171 | \$15,444,390 | 3,102 | \$743,886 | 860 | \$129,413 | \$3,241,450 | \$578,022 | \$400,702 | \$3,922,668 | \$340,058 | \$129,485,320 | \$127,675,781 | \$1,809,539 | \$172,129,398 | 1 |
|---------|--------------|-------|-----------|-----|-----------|-------------|-----------|-----------|-------------|-----------|---------------|---------------|-------------|---------------|----|
| 11 | 2,460 | | | | | 856 | 138 | | 358 | 360 | 10,819 | 10,590 | 229 | 18,275 | 2 |
| 10 | 3,150 | 4 | 1,626 | | | 1,058 | 757 | 31 | 270 | | 14,175 | 14,057 | 118 | 27,750 | 3 |
| 5 | 2,530 | 3 | 800 | 8 | 200 | 1,075 | 615 | 39 | 221 | 200 | 12,143 | 11,944 | 199 | 29,909 | 4 |
| 50 | 20,293 | 1 | 100 | 1 | 195 | 10,574 | 6,563 | 889 | 3,532 | 90 | 46,131 | 43,937 | 2,144 | 130,353 | 5 |
| 611 | 254,103 | | | 7 | 974 | 57,030 | 28,194 | 9,773 | 17,411 | 1,661 | 545,581 | 488,756 | 56,825 | 1,795,685 | 6 |
| 75 | 32,559 | 1 | 125 | | | 10,552 | 13,931 | 744 | 4,672 | 205 | 109,385 | 106,525 | 2,860 | 307,333 | 7 |
| 12 | 5,500 | | | | | 1,652 | 380 | 110 | 1,162 | | 32,936 | 32,500 | 370 | 49,341 | 8 |
| 205 | 75,240 | 12 | 3,744 | 47 | 9,866 | 12,315 | 1,295 | 1,453 | 9,567 | | 338,938 | 337,444 | 1,494 | 435,322 | 9 |
| 288 | 121,221 | 30 | 16,163 | 12 | 1,630 | 39,135 | 21,975 | 3,348 | 13,312 | | 518,064 | 493,324 | 22,740 | 979,315 | 10 |
| 892 | 312,594 | | | 13 | 1,730 | 67,709 | 1,284 | 5,343 | 43,952 | 7,100 | 156,294 | 155,226 | 121,068 | 724,351 | 11 |
| 208 | 124,060 | | | | | 18,619 | 230 | 13,389 | | | 467,393 | 466,393 | 1,000 | 677,000 | 12 |
| 100 | 36,610 | 3 | 1,050 | 12 | 2,073 | 3,326 | 1,100 | 416 | 1,770 | 40 | 111,728 | 111,020 | 708 | 209,004 | 13 |
| 1,751 | 841,696 | 4 | 1,720 | 5 | 1,163 | 235,604 | 14,985 | 3,371 | 11,328 | 206,920 | 2,076,152 | 2,071,593 | 4,559 | 3,867,761 | 14 |
| 2 | 788 | 5 | 640 | | | 669 | 410 | 33 | 176 | | 11,892 | 11,191 | 201 | 26,216 | 15 |
| 233 | 100,930 | 1 | 300 | 5 | 1,046 | 20,418 | 6,861 | 2,388 | 9,512 | 2,157 | 150,698 | 145,175 | 5,518 | 377,134 | 16 |
| 5,590 | 3,476,251 | | | 2 | 149 | 101,467 | | 37,799 | 63,658 | | 3,071,173 | 2,993,803 | 77,365 | 6,816,816 | 17 |
| 886 | 164,908 | 7 | 2,035 | 2 | 350 | 71,383 | 5,569 | 7,456 | 57,946 | 412 | 3,062,335 | 3,003,797 | 58,538 | 3,652,530 | 18 |
| 422 | 214,016 | 148 | 37,701 | 5 | 472 | 49,793 | 35,949 | 1,904 | 11,290 | 650 | 367,140 | 360,114 | 7,026 | 931,736 | 19 |
| 11 | 4,602 | 30 | 14,387 | | | 2,262 | 850 | 330 | 1,082 | | 63,027 | 62,305 | 722 | 98,710 | 20 |
| | | 323 | 54,936 | | | 9,243 | 7,389 | 290 | 1,421 | 148 | 50,446 | 49,090 | 1,350 | 195,091 | 21 |
| 28 | 11,425 | | | | | 12,069 | 260 | 639 | 11,170 | | 28,136 | 26,514 | 1,622 | 32,270 | 22 |
| 92 | 34,749 | 57 | 10,814 | 6 | 631 | 21,205 | 11,289 | 1,466 | 3,350 | 100 | 211,070 | 203,533 | 7,537 | 333,310 | 23 |
| 218 | 94,944 | | | 5 | 630 | 9,164 | 2,157 | 1,350 | 5,657 | | 199,705 | 189,408 | 1,297 | 402,805 | 24 |
| 10 | 3,580 | | | | | 3,088 | 1,498 | 234 | 1,356 | | 10,870 | 10,125 | 745 | 28,236 | 25 |
| 10 | 4,020 | 1 | 346 | | | 1,524 | 1,050 | 87 | 387 | | 1,655 | 1,281 | 374 | 15,317 | 26 |
| 21 | 11,169 | | | | | 1,898 | 564 | 30 | 1,304 | | 27,344 | 26,951 | 393 | 52,523 | 27 |
| 155 | 70,832 | | | | | 52,380 | 40 | 2,000 | 50,340 | | 411,139 | 381,389 | 29,200 | 549,943 | 28 |
| 1,441 | 741,891 | 8 | 1,221 | 2 | 350 | 447,747 | 26,264 | 69,634 | 347,799 | 4,650 | 18,595,258 | 18,338,263 | 256,995 | 21,926,768 | 29 |
| 6 | 2,513 | 7 | 1,390 | 1 | 150 | 4,139 | 632 | 51 | 3,006 | | 21,772 | 20,417 | 1,355 | 41,395 | 30 |
| 1,234 | 714,144 | 2 | 700 | 10 | 1,839 | 113,929 | 6,324 | 12,837 | 87,787 | 6,931 | 1,470,774 | 1,398,278 | 72,496 | 2,804,268 | 31 |
| 51 | 10,124 | 51 | 5,564 | 14 | 1,460 | 11,722 | 596 | 363 | 10,763 | | 68,465 | 66,866 | 1,599 | 113,675 | 32 |
| 35 | 18,339 | 3 | 380 | 2 | 102 | 5,732 | 3,350 | 574 | 1,808 | | 38,192 | 37,495 | 697 | 99,458 | 33 |
| 176 | 66,403 | 13 | 3,164 | 31 | 3,332 | 18,800 | 1,963 | 1,287 | 3,507 | 12,063 | 141,615 | 137,990 | 3,625 | 302,339 | 34 |
| 85 | 48,532 | | | | | 40,651 | 100 | 10,395 | 50,156 | | 106,597 | 96,436 | 10,161 | 325,465 | 35 |
| 3 | 1,500 | | | | | 821 | 121 | 200 | 200 | | 2,165 | 2,085 | 80 | 5,030 | 36 |
| 4 | 2,154 | 1 | 300 | | | 402 | 276 | 15 | 111 | | 1,455 | 1,415 | 40 | 6,440 | 37 |
| 113 | 55,217 | 1 | 210 | | | 15,715 | 601 | 2,849 | 12,265 | | 55,784 | 53,343 | 38,441 | 196,310 | 38 |
| 166 | 60,367 | 1 | 360 | | | 40,164 | 4,475 | 1,404 | 25,169 | | 88,056 | 83,944 | 29,712 | 314,451 | 39 |
| 14 | 5,235 | | | | | 3,676 | 2,704 | 277 | 645 | | 15,971 | 15,452 | 519 | 49,820 | 40 |
| 7 | 3,630 | 3 | 650 | | | 3,009 | 2,109 | 128 | 472 | | 14,168 | 13,893 | 272 | 31,930 | 41 |
| 75 | 22,747 | | | 1 | 150 | 3,827 | 1,635 | 678 | 1,514 | | 43,251 | 43,176 | 75 | 104,132 | 42 |
| 294 | 133,921 | 1 | 150 | 2 | 300 | 14,301 | 1,024 | 2,067 | 11,010 | 200 | 311,907 | 305,946 | 5,961 | 559,203 | 43 |
| 292 | 141,776 | | | 2 | 200 | 10,344 | 4,575 | 1,022 | 3,147 | 1,600 | 66,343 | 63,608 | 2,735 | 314,631 | 44 |
| 602 | 315,841 | | | | | 49,743 | 3,293 | 667 | 7,953 | | 601,877 | 601,277 | 1,600 | 1,137,337 | 45 |
| 63 | 24,854 | 18 | 4,299 | 1 | 280 | 4,827 | 2,132 | 442 | 2,193 | | 93,601 | 92,251 | 1,350 | 156,736 | 46 |

TABLE 7.—MANUFACTURES BY

| MANUFACTURING AND MECHANICAL INDUSTRIES. | Number of establishments. | CAPITAL. | | | | | Proprietors and firm members. | SALARIED OFFICIALS, CLERKS, ETC. | | AVERAGE NUMBER OF WAGE-EARNERS AND TOTAL WAGES. | |
|---|---------------------------|------------|-----------|------------|-----------------------------------|--------------------|-------------------------------|----------------------------------|-----------|---|-----------|
| | | Total. | Land. | Buildings. | Machinery, tools, and implements. | Cash and sundries. | | Number. | Salaries. | Total. | |
| | | | | | | | | | | Average number. | Wages. |
| 47 Millinery, custom work..... | 461 | \$531,130 | \$24,455 | \$84,865 | \$27,524 | \$414,286 | 561 | 41 | \$14,198 | 650 | \$143,707 |
| 48 Mineral and soda waters..... | 50 | 177,389 | 19,575 | 32,530 | 81,930 | 43,334 | 66 | 4 | 1,745 | 83 | 30,277 |
| 49 Monuments and tombstones..... | 73 | 164,185 | 10,820 | 12,416 | 12,000 | 128,949 | 93 | 32 | 18,076 | 144 | 64,271 |
| 50 Painting, house, sign, etc..... | 215 | 168,140 | 10,934 | 16,589 | 29,122 | 111,495 | 266 | 14 | 6,931 | 469 | 226,270 |
| 51 Paper hanging..... | 25 | 25,298 | 2,500 | 3,650 | 2,565 | 17,583 | 35 | 8 | 486 | 51 | 30,495 |
| 52 Patent medicines and compounds..... | 22 | 51,865 | 2,850 | 5,175 | 10,010 | 33,880 | 34 | 45 | 11,880 | 66 | 16,820 |
| 53 Paving and paving materials..... | 44 | 184,779 | 47,531 | 28,750 | 41,813 | 66,385 | 63 | 6 | 3,614 | 564 | 239,947 |
| 54 Photography..... | 221 | 220,444 | 19,250 | 49,743 | 104,950 | 46,471 | 236 | 4 | 1,012 | 99 | 35,404 |
| 55 Plastering and stuccowork..... | 60 | 20,596 | 3,170 | 5,650 | 4,391 | 7,385 | 74 | | | 116 | 66,506 |
| 56 Plumbing, and gas and steam fitting..... | 88 | 802,607 | 18,225 | 33,475 | 39,300 | 211,607 | 111 | 18 | 12,040 | 323 | 163,701 |
| 57 Pottery, terra cotta, and fire-clay products..... | 3 | 19,700 | 1,800 | 4,200 | 9,400 | 4,800 | 3 | 1 | 1,200 | 22 | 11,520 |
| 58 Printing and publishing, book and job..... | 66 | 698,851 | 12,500 | 10,900 | 348,323 | 227,128 | 77 | 43 | 38,695 | 384 | 188,675 |
| 59 Printing and publishing, newspapers and periodicals..... | 595 | 1,920,636 | 63,700 | 222,375 | 1,181,989 | 502,572 | 701 | 169 | 107,369 | 1,766 | 623,783 |
| 60 Roofing and roofing materials..... | 12 | 19,685 | 1,500 | 1,800 | 3,950 | 12,435 | 16 | | | 25 | 10,388 |
| 61 Saddlery and harness..... | 477 | 1,297,366 | 99,665 | 236,081 | 106,223 | 865,442 | 543 | 32 | 21,495 | 516 | 229,211 |
| 62 Salt..... | 8 | 960,733 | 68,732 | 863,454 | 266,869 | 261,678 | 2 | 32 | 36,010 | 450 | 168,034 |
| 63 Sewing machine repairing..... | 4 | 4,290 | | 1,225 | 2,865 | 4 | 4 | | | 6 | 1,800 |
| 64 Shirts..... | 4 | 41,100 | 1,300 | 15,300 | 5,800 | 13,700 | 6 | 3 | 2,435 | 8 | 13,914 |
| 65 Slaughtering and meat packing, wholesale..... | 11 | 16,410,477 | 771,728 | 2,639,200 | 1,658,062 | 11,341,487 | 8 | 1,330 | 1,020,010 | 8,068 | 3,543,777 |
| 66 Slaughtering, wholesale, not including meat packing..... | 3 | 75,700 | 21,500 | 19,000 | 20,700 | 14,500 | 1 | 11 | 11,856 | 49 | 81,272 |
| 67 Soap and candles..... | 7 | 947,182 | 74,100 | 154,000 | 186,076 | 533,006 | 10 | 58 | 63,551 | 177 | 75,273 |
| 68 Sugar and molasses, refining..... | 14 | 9,275 | 1,075 | 1,840 | 4,655 | 1,705 | 14 | | | 12 | 2,563 |
| 69 Surgical appliances..... | 3 | 105,483 | 5,500 | 13,000 | 17,135 | 69,848 | 2 | 26 | 14,319 | 47 | 11,826 |
| 70 Tinsmithing, coppersmithing, and sheet-iron working..... | 337 | 649,694 | 95,475 | 177,392 | 125,173 | 251,614 | 405 | 8 | 3,470 | 451 | 224,975 |
| 71 Tobacco, cigars and cigarettes..... | 169 | 408,086 | 21,750 | 60,045 | 26,373 | 299,918 | 191 | 14 | 9,504 | 495 | 190,699 |
| 72 Trunks and valises..... | 3 | 27,589 | 1,500 | 5,000 | 2,950 | 13,139 | 3 | 4 | 3,686 | 39 | 11,951 |
| 73 Vinegar and cider..... | 16 | 49,166 | 3,625 | 9,630 | 23,850 | 12,061 | 18 | 2 | 1,800 | 23 | 6,794 |
| 74 Washing machines and clothes wringers..... | 4 | 3,885 | 600 | 600 | 2,325 | 360 | 4 | | | | |
| 75 Watch, clock, and jewelry repairing..... | 293 | 290,948 | 23,155 | 43,415 | 95,601 | 123,777 | 309 | 6 | 3,336 | 134 | 59,134 |
| 76 Windmills..... | 6 | 23,495 | 560 | 4,400 | 6,500 | 12,085 | 10 | 1 | 600 | 11 | 5,994 |
| 77 Wirework, including wire rope and cable..... | 8 | 22,433 | 1,290 | 2,400 | 3,700 | 15,043 | 12 | | | 12 | 3,075 |
| 78 Zinc, smelting and refining..... | 11 | 5,218,529 | 1,684,026 | 2,206,702 | 405,464 | 922,337 | 2 | 40 | 60,800 | 1,487 | 705,303 |
| 79 All other industries ¹ | 80 | 12,151,440 | 310,269 | 3,805,451 | 4,839,116 | 3,196,604 | 90 | 261 | 231,275 | 1,296 | 596,921 |

¹ Embraces bags, other than paper, 1; baskets, and rattan and willow ware, 1; bookbinding and blank book making, 2; boots and shoes, factory product, 1; boxes, cigar, 2; boxes, fancy and paper, 2; butter, reworking, 1; carriage and wagon materials, 1; cars and general shop construction and repairs by street railroad companies, 1; coffee and spice, roasting and grinding, 1; coffins, burial cases, and undertakers' goods, 1; cordage and twine, 1; cordials and sirups, 1; cutlery and edge tools, 1; dentists' materials, 1; electroplating, 1; engraving, steel, including plate printing, 1; explosives, 1; fancy articles, not elsewhere specified, 2; flavoring extracts, 1; fur goods, 1; furnishing goods, men's, 2; gas and lamp fixtures, 1; gloves and mittens, 1; grease and tallow, 1; hardware, 1; hosiery and knit goods, 1; house-furnishing goods, not elsewhere specified, 2; iron and steel, 1; ironwork, architectural and ornamental, 2; jewelry, 2; labels and tags, 1; lamps and

TABLE 8.—MANUFACTURES IN CITIES

KANSAS CITY.

| | | \$18,633,475 | \$1,063,395 | \$3,062,529 | \$2,092,747 | \$12,414,804 | 538 | 2,075 | \$1,918,251 | 10,544 | \$4,880,259 |
|---|-----|--------------|-------------|-------------|-------------|--------------|-----|-------|-------------|--------|-------------|
| 1 All industries..... | 492 | | | | | | | | | | |
| 2 Blacksmithing and wheelwrighting..... | 33 | 24,340 | 5,700 | 5,760 | 4,915 | 7,975 | 40 | | | 29 | 15,059 |
| 3 Boots and shoes, custom work and repairing..... | 29 | 11,351 | 1,300 | 878 | 1,855 | 7,318 | 20 | 1 | 800 | 8 | 4,139 |
| 4 Boxes, wooden packing..... | 4 | 215,335 | 22,000 | 48,000 | 70,735 | 74,650 | 3 | 17 | 11,840 | 252 | 85,420 |
| 5 Bread and other bakery products..... | 19 | 20,345 | 1,800 | 4,600 | 6,170 | 7,775 | 19 | 6 | 1,420 | 33 | 16,463 |
| 6 Brooms and brushes..... | 3 | 8,925 | | 150 | 2,175 | 6,600 | 4 | | | 22 | 9,100 |
| 7 Carpentering..... | 72 | 72,836 | 13,525 | 16,615 | 12,141 | 30,555 | 81 | | | 221 | 152,544 |
| 8 Carriages and wagons..... | 5 | 16,950 | 1,750 | 4,600 | 3,550 | 7,050 | 7 | | | 17 | 9,000 |
| 9 Clothing, men's, custom work and repairing..... | 17 | 23,610 | 500 | 500 | 2,495 | 20,615 | 17 | 4 | 3,600 | 34 | 18,740 |
| 10 Clothing, women's, dressmaking..... | 27 | 9,831 | 1,250 | 3,200 | 1,910 | 3,521 | 30 | | | 29 | 6,338 |
| 11 Confectionery..... | 3 | 3,605 | 350 | 350 | 2,033 | 822 | 6 | | | 8 | 3,600 |
| 12 Cooperage..... | 4 | 146,336 | 22,500 | 9,000 | 25,339 | 89,947 | 3 | 8 | 5,086 | 198 | 86,858 |
| 13 Flouring and grist mill products..... | 7 | 55,570 | 3,000 | 5,400 | 9,620 | 37,550 | 13 | 7 | 3,500 | 22 | 13,251 |
| 14 Foundry and machine shop products..... | 6 | 687,523 | 108,255 | 156,890 | 142,912 | 279,466 | 4 | 21 | 19,522 | 290 | 223,155 |
| 15 Furniture, cabinetmaking, repairing, and upholstering..... | 6 | 1,675 | | | 590 | 1,085 | 5 | | | 4 | 1,792 |
| 16 Masonry, brick and stone..... | 33 | 46,855 | 8,550 | 13,435 | 4,565 | 20,305 | 42 | | | 216 | 144,507 |
| 17 Millinery, custom work..... | 9 | 10,261 | 1,400 | 1,760 | 190 | 6,921 | 10 | | | 10 | 1,836 |
| 18 Painting, house, sign, etc..... | 35 | 26,420 | 4,000 | 6,550 | 3,850 | 12,020 | 41 | 1 | 800 | 71 | 49,090 |
| 19 Paper hanging..... | 7 | 3,375 | 50 | 25 | 600 | 2,700 | 9 | 1 | 156 | 11 | 6,433 |
| 20 Patent medicines and compounds..... | 3 | 1,165 | | | 40 | 1,125 | 6 | | | 2 | 572 |
| 21 Paving and paving materials..... | 18 | 71,900 | 3,925 | 11,950 | 13,775 | 42,250 | 15 | | | 258 | 118,060 |
| 22 Photography..... | 7 | 4,065 | 305 | 1,400 | 1,515 | 845 | 7 | | | 4 | 1,819 |
| 23 Plastering and stuccowork..... | 17 | 6,700 | 1,075 | 1,975 | 850 | 2,800 | 19 | | | 44 | 29,606 |
| 24 Plumbing, and gas and steam fitting..... | 11 | 12,845 | | | 4,700 | 8,145 | 13 | 1 | 450 | 38 | 25,565 |
| 25 Printing and publishing, book and job..... | 5 | 12,400 | | | 10,300 | 2,100 | 7 | | | 12 | 5,443 |
| 26 Printing and publishing, newspapers and periodicals..... | 11 | 33,165 | 300 | 1,700 | 24,400 | 6,765 | 11 | 6 | 4,260 | 31 | 13,905 |

SPECIFIED INDUSTRIES: 1900—Continued.

| AVERAGE NUMBER OF WAGE-EARNERS AND TOTAL WAGES—Continued. | | | | | | MISCELLANEOUS EXPENSES. | | | | | COST OF MATERIALS USED. | | | Value of products, including custom work and repairing. | |
|---|-----------|---------------------------|-----------|---------------------------|--------|-------------------------|----------------|--|---------------------------------|----------------|-------------------------|---|----------------------------------|---|----|
| Men, 16 years and over. | | Women, 16 years and over. | | Children, under 16 years. | | Total. | Rent of works. | Taxes, not including internal revenue. | Rent of offices, interest, etc. | Contract work. | Total. | Principal materials, including mill supplies and freight. | Fuel and rent of power and heat. | | |
| Average number. | Wages. | Average number. | Wages. | Average number. | Wages. | | | | | | | | | | |
| 1 | \$520 | 645 | \$142,867 | 4 | \$380 | \$80,719 | \$56,128 | \$4,562 | \$19,711 | \$318 | \$680,669 | \$675,068 | \$5,601 | \$1,296,163 | 47 |
| 73 | 28,710 | 8 | 602 | 7 | 905 | 8,385 | 2,107 | 1,407 | 4,388 | 483 | 56,111 | 54,734 | 1,377 | 176,437 | 48 |
| 141 | 65,846 | 1 | 250 | 2 | 175 | 9,684 | 4,495 | 923 | 4,238 | 28 | 226,098 | 224,828 | 1,270 | 412,732 | 49 |
| 464 | 225,458 | 3 | 500 | 2 | 317 | 24,369 | 15,617 | 1,053 | 6,814 | 885 | 267,658 | 265,670 | 983 | 746,977 | 50 |
| 54 | 30,045 | | | | | 2,963 | 1,508 | 178 | 1,282 | | 20,040 | 23,360 | 80 | 94,129 | 51 |
| 47 | 13,016 | 18 | 8,700 | 1 | 104 | 18,993 | 1,702 | 453 | 16,838 | | 36,760 | 36,331 | 429 | 123,395 | 52 |
| 563 | 239,647 | | | | | 30,538 | 2,085 | 2,615 | 10,700 | 15,133 | 588,965 | 546,496 | 42,469 | 969,621 | 53 |
| 53 | 24,149 | 44 | 11,137 | 2 | 118 | 32,951 | 20,391 | 1,581 | 10,535 | 441 | 117,850 | 114,060 | 8,790 | 385,090 | 54 |
| 116 | 66,194 | | | | | 2,368 | 1,320 | 166 | 682 | 800 | 91,028 | 90,908 | 120 | 221,167 | 55 |
| 316 | 162,411 | 3 | 904 | 4 | 386 | 24,954 | 12,019 | 2,087 | 8,998 | 1,850 | 453,342 | 450,383 | 2,959 | 810,010 | 56 |
| 22 | 11,520 | | | | | 564 | | 145 | 419 | | 5,824 | 3,166 | 2,658 | 29,060 | 57 |
| 317 | 173,072 | 64 | 15,275 | 3 | 328 | 52,039 | 13,715 | 2,777 | 35,047 | 500 | 258,242 | 250,041 | 8,201 | 662,869 | 58 |
| 1,144 | 502,408 | 364 | 89,439 | 258 | 31,936 | 105,520 | 50,552 | 12,711 | 113,509 | 18,745 | 533,452 | 503,019 | 30,438 | 2,348,453 | 59 |
| 25 | 10,386 | | | | | 1,641 | 730 | 180 | 631 | | 13,223 | 13,013 | 210 | 32,261 | 60 |
| 508 | 227,641 | 2 | 1,000 | 6 | 570 | 65,991 | 32,269 | 10,342 | 23,233 | 147 | 830,039 | 821,671 | 8,369 | 1,580,553 | 61 |
| 429 | 163,724 | 21 | 4,310 | | | 52,798 | 500 | 5,798 | 46,505 | | 327,890 | 208,854 | 119,036 | 717,449 | 62 |
| 2 | 1,120 | 4 | 680 | | | 458 | 276 | 10 | 172 | | 1,080 | 990 | 90 | 5,740 | 63 |
| 14 | 3,324 | 74 | 10,020 | | | 1,577 | 246 | 465 | 866 | | 14,984 | 14,175 | 809 | 41,100 | 64 |
| 7,121 | 3,299,359 | 661 | 190,802 | 286 | 53,616 | 2,000,035 | 44,460 | 108,644 | 1,846,931 | | 67,402,245 | 67,066,018 | 336,227 | 76,829,189 | 65 |
| 49 | 31,272 | | | | | 3,736 | 720 | 226 | 2,790 | | 506,715 | 504,175 | 2,540 | 582,744 | 66 |
| 131 | 65,207 | 35 | 8,781 | 8 | 1,235 | 197,436 | 2,200 | 3,936 | 191,301 | | 608,897 | 683,327 | 15,570 | 1,083,337 | 67 |
| 11 | 2,445 | 1 | 118 | | | 141 | 46 | 95 | 95 | | 6,294 | 6,685 | 609 | 10,720 | 68 |
| 23 | 7,034 | 24 | 4,792 | | | 51,474 | 1,000 | 700 | 49,774 | | 35,942 | 35,339 | 603 | 151,278 | 69 |
| 445 | 224,182 | 6 | 703 | | | 39,417 | 21,337 | 5,478 | 11,602 | 1,000 | 494,346 | 485,959 | 8,387 | 1,045,660 | 70 |
| 339 | 151,769 | 117 | 34,312 | 39 | 4,628 | 128,569 | 17,332 | 2,992 | 108,195 | | 283,808 | 281,218 | 2,590 | 789,780 | 71 |
| 29 | 10,033 | 9 | 1,768 | 1 | 150 | 8,047 | 1,516 | 501 | 1,030 | | 21,326 | 20,712 | 614 | 47,148 | 72 |
| 22 | 6,614 | 1 | 150 | | | 1,807 | 781 | 316 | 710 | | 24,869 | 23,129 | 1,740 | 57,023 | 73 |
| | | | | | | 125 | 110 | 15 | 15 | | 1,355 | 1,296 | 59 | 4,050 | 74 |
| 118 | 55,726 | 8 | 2,181 | 8 | 1,227 | 35,824 | 24,596 | 2,452 | 8,536 | 240 | 78,311 | 75,218 | 3,093 | 352,705 | 75 |
| 11 | 5,994 | | | | | 1,422 | 464 | 138 | 620 | | 12,017 | 11,422 | 595 | 27,725 | 76 |
| 12 | 3,075 | | | | | 1,134 | 246 | 88 | 300 | | 27,361 | 26,949 | 412 | 41,144 | 77 |
| 1,485 | 704,903 | 2 | 900 | | | 81,169 | 7,800 | 11,023 | 62,346 | | 4,678,946 | 4,474,773 | 204,173 | 5,790,144 | 78 |
| 1,060 | 539,903 | 206 | 54,523 | 30 | 2,495 | 484,036 | 12,738 | 12,630 | 451,911 | 6,707 | 16,843,532 | 16,673,994 | 169,538 | 23,310,081 | 79 |

reflectors, 2; lard, refined, 1; lead, smelting and refining, 2; leather, tanned, curried, and finished, 1; liquors, malt, 2; liquors, vinous, 2; lithographing and engraving, 1; mirrors, 1; models and patterns, 2; oil, cottonseed and cake, 1; oil, linseed, 1; oil, not elsewhere specified, 1; oleomargarine, 2; optical goods, 1; paints, 1; paper and wood pulp, 2; perfumery and cosmetics, 2; petroleum, refining, 1; pickles, preserves, and sauces, 1; plumbers' supplies, 1; pumps, not including steam pumps, 2; scales and balances, 2; sewing machines and attachments, 1; steam packing, 1; tools, not elsewhere specified, 1; upholstering materials, 2; wood, turned and carved, 2; woolen goods, 1.

BY SPECIFIED INDUSTRIES: 1900.

KANSAS CITY.

| | | | | | | | | | | | | | | | |
|-------|-------------|-----|-----------|-----|----------|-------------|----------|-----------|-------------|----------|--------------|--------------|-----------|--------------|----|
| 9,384 | \$4,589,835 | 812 | \$230,933 | 348 | \$65,441 | \$2,643,077 | \$88,336 | \$122,694 | \$2,356,976 | \$75,071 | \$70,396,491 | \$69,914,739 | \$471,752 | \$82,768,913 | 1 |
| 28 | 14,851 | | | 1 | 208 | 3,287 | 2,103 | 346 | 778 | | 18,696 | 17,253 | 1,443 | 64,900 | 2 |
| 3 | 4,139 | | | | | 2,158 | 1,797 | 64 | 297 | | 10,188 | 9,972 | 216 | 34,623 | 3 |
| 196 | 71,940 | 12 | 3,744 | 44 | 9,786 | 11,923 | 1,100 | 1,386 | 9,437 | | 327,423 | 326,014 | 1,409 | 464,050 | 4 |
| 29 | 15,352 | 4 | 1,111 | | | 3,621 | 2,397 | 84 | 1,140 | | 54,524 | 51,828 | 2,696 | 105,214 | 5 |
| 22 | 9,100 | | | | | 1,049 | 192 | 62 | 795 | | 13,365 | 13,185 | 180 | 26,800 | 6 |
| 220 | 152,336 | | | 1 | 208 | 40,277 | 2,960 | 760 | 4,017 | 32,510 | 405,506 | 404,773 | 733 | 709,490 | 7 |
| 16 | 9,300 | 1 | 300 | | | 937 | 60 | 125 | 752 | | 17,196 | 16,559 | 637 | 35,620 | 8 |
| 31 | 17,550 | 3 | 1,190 | | | 3,104 | 1,928 | 121 | 1,055 | | 34,998 | 34,756 | 237 | 55,769 | 9 |
| 6 | 3,100 | 29 | 6,338 | | | 1,527 | 984 | 89 | 454 | | 10,732 | 10,487 | 245 | 33,807 | 10 |
| | | 2 | 500 | | | 641 | 456 | 20 | 165 | | 7,190 | 6,840 | 350 | 17,300 | 11 |
| 193 | 86,223 | | | 5 | 630 | 6,948 | 2,120 | 970 | 3,858 | | 154,956 | 153,926 | 1,030 | 249,270 | 12 |
| 22 | 13,251 | | | | | 10,011 | 3,461 | 724 | 5,856 | | 479,459 | 474,601 | 4,855 | 525,496 | 13 |
| 288 | 222,972 | | | 2 | 183 | 23,038 | 240 | 2,398 | 19,839 | 91 | 415,097 | 384,422 | 30,675 | 776,308 | 14 |
| 4 | 1,792 | | | | | 575 | 464 | 260 | 111 | | 1,690 | 1,650 | 40 | 6,895 | 15 |
| 216 | 144,507 | | | | | 32,936 | 1,850 | 397 | 4,989 | 25,700 | 323,479 | 322,237 | 1,242 | 570,536 | 16 |
| 71 | 49,090 | 10 | 1,836 | | | 1,767 | 818 | 84 | 870 | | 9,802 | 9,777 | 25 | 18,111 | 17 |
| 11 | 6,483 | | | | | 4,695 | 2,596 | 204 | 1,895 | | 56,361 | 56,148 | 213 | 147,150 | 18 |
| 1 | 312 | 1 | 260 | | | 596 | 420 | 26 | 150 | | 5,635 | 5,625 | 10 | 20,172 | 19 |
| 252 | 117,760 | | | 1 | 300 | 541 | 211 | 330 | 830 | | 725 | 700 | 25 | 4,150 | 20 |
| | | | | | | 25,991 | 534 | 1,892 | 8,665 | 14,900 | 435,651 | 396,672 | 38,979 | 622,906 | 21 |
| 8 | 1,585 | 1 | 234 | | | 1,009 | 692 | 47 | 254 | 16 | 3,693 | 3,688 | 10 | 13,401 | 22 |
| 44 | 29,306 | | | | | 1,366 | 700 | 54 | 332 | 300 | 30,566 | 30,496 | 70 | 78,397 | 23 |
| 33 | 25,565 | | | | | 2,224 | 1,309 | 40 | 875 | | 59,771 | 59,486 | 285 | 105,886 | 24 |
| 10 | 4,935 | 2 | 508 | | | 1,171 | 544 | 99 | 528 | | 6,170 | 5,725 | 445 | 18,300 | 25 |
| 27 | 12,769 | 3 | 1,040 | 1 | 96 | 4,920 | 2,573 | 278 | 2,015 | 54 | 16,704 | 16,087 | 617 | 59,068 | 26 |

TABLE 8.—MANUFACTURES IN CITIES

KANSAS CITY—Continued.

| MANUFACTURING AND MECHANICAL INDUSTRIES. | Number of establishments. | CAPITAL. | | | | | Proprietors and firm members. | SALARIED OFFICIALS, CLERKS, ETC. | | AVERAGE NUMBER OF WAGE-EARNERS AND TOTAL WAGES. | |
|---|---------------------------|------------|-----------|------------|-----------------------------------|--------------------|-------------------------------|----------------------------------|-------------|---|-----------|
| | | Total. | Land. | Buildings. | Machinery, tools, and implements. | Cash and sundries. | | Number. | Salaries. | Total. | |
| | | | | | | | | | | Average number. | Wages. |
| 27 Roofing and roofing materials | 8 | \$4,830 | | | \$850 | \$3,980 | 6 | | 5 | \$3,020 | |
| 28 Saddlery and harness | 6 | 12,660 | | \$100 | 1,270 | 11,290 | 7 | | 5 | 4,600 | |
| 29 Slaughtering and meat packing, wholesale | 5 | 15,038,901 | \$384,128 | 2,800,000 | 1,298,776 | 10,746,997 | 2 | 1,760 | \$1,567,580 | 7,664 | 3,350,238 |
| 30 Slaughtering, wholesale, not including meat packing. | 3 | 75,700 | 21,500 | 10,000 | 20,700 | 14,500 | 1 | 11 | 11,856 | 49 | 31,272 |
| 31 Soap and candles | 3 | 904,957 | 71,500 | 141,500 | 179,057 | 512,900 | 5 | 57 | 62,651 | 164 | 69,003 |
| 32 Tinsmithing, coppersmithing, and sheet-iron working. | 23 | 31,103 | 2,400 | 6,340 | 6,370 | 15,993 | 27 | 3 | 1,780 | 50 | 86,739 |
| 33 Tobacco, cigars and cigarettes | 10 | 10,370 | 770 | 1,800 | 625 | 7,175 | 10 | | | 8 | 4,586 |
| 34 Watch, clock, and jewelry repairing | 14 | 12,950 | 150 | 250 | 3,650 | 8,900 | 11 | 1 | 900 | 7 | 2,842 |
| 35 All other industries ¹ | 34 | 1,014,021 | 81,912 | 239,821 | 230,124 | 412,164 | 29 | 170 | 223,050 | 724 | 340,964 |

¹ Embraces awnings, tents, and sails, 1; bicycle and tricycle repairing, 1; brick and tile, 1; cars and general shop construction and repairs by steam railroad companies, 1; clothing, men's, factory product, 1; Collins, burial cases, and undertakers' goods, 1; fancy articles, not elsewhere specified, 1; fertilizers, 2; furnishing goods, men's, 1; furniture, factory product, 2; gas, illuminating and heating, 1; gas machines and meters, 1; grease and tallow, 1; house furnishing goods, not else-

LEAVENWORTH.

| | | | | | | | | | | | |
|---|-----|-------------|-----------|-----------|-----------|-------------|-----|-----|-----------|-------|-----------|
| 1 All industries | 220 | \$3,207,111 | \$220,436 | \$559,313 | \$608,235 | \$1,734,077 | 252 | 232 | \$211,761 | 1,750 | \$333,576 |
| 2 Blacksmithing and wheelwrighting | 16 | 16,949 | 6,050 | 3,900 | 2,455 | 4,544 | 18 | | | 9 | 4,134 |
| 3 Boots and shoes, custom work and repairing. | 9 | 1,261 | | | 810 | 451 | 10 | | | | |
| 4 Bread and other bakery products | 11 | 54,530 | 7,500 | 23,400 | 6,400 | 17,230 | 12 | 5 | 2,276 | 36 | 11,674 |
| 5 Carpentering | 17 | 111,305 | 3,750 | 7,550 | 4,945 | 95,120 | 19 | 3 | 2,620 | 106 | 56,093 |
| 6 Carriages and wagons | 6 | 39,051 | 9,000 | 18,300 | 8,350 | 53,401 | 7 | 13 | 9,980 | 53 | 23,146 |
| 7 Clothing, men's, custom work and repairing. | 10 | 25,223 | | | 1,175 | 24,048 | 11 | | | 29 | 16,770 |
| 8 Clothing, women's, dressmaking | 9 | 4,985 | 700 | 1,550 | 880 | 1,855 | 9 | | | 45 | 8,484 |
| 9 Confectionery | 3 | 1,350 | | | 450 | 900 | 3 | | | 5 | 1,422 |
| 10 Flouring and grist mill products | 5 | 408,033 | 40,540 | 62,095 | 88,563 | 216,835 | 6 | 15 | 15,390 | 53 | 25,640 |
| 11 Foundry and machine shop products | 6 | 324,216 | 30,070 | 178,972 | 106,238 | 508,336 | 7 | 58 | 70,711 | 320 | 197,331 |
| 12 Furniture, factory product | 4 | 201,831 | 7,226 | 28,628 | 40,423 | 125,549 | 2 | 25 | 17,832 | 159 | 50,216 |
| 13 Marble and stone work | 3 | 18,470 | 4,000 | 3,000 | 1,035 | 10,375 | 4 | 3 | 1,200 | 6 | 3,050 |
| 14 Masonry, brick and stone | 4 | 24,705 | 1,300 | 1,500 | 805 | 21,100 | 4 | | | 30 | 16,350 |
| 15 Millinery, custom work | 3 | 26,275 | | | 485 | 25,790 | 13 | 6 | 3,162 | 23 | 10,017 |
| 16 Mineral and soda waters | 3 | 12,125 | 1,300 | 2,300 | 5,800 | 2,725 | 5 | | | 3 | 3,322 |
| 17 Painting, house, sign, etc. | 6 | 21,944 | | | 1,330 | 20,614 | 7 | 4 | 1,956 | 41 | 22,016 |
| 18 Paving and paving materials | 3 | 11,610 | 6,500 | 1,500 | 1,010 | 2,500 | 3 | 3 | 2,040 | 35 | 14,372 |
| 19 Photography | 5 | 3,330 | | 200 | 5,050 | 3,130 | 3 | 2 | 562 | 5 | 2,100 |
| 20 Plumbing, and gas and steam fitting | 3 | 23,500 | 1,000 | 5,000 | 800 | 16,700 | 4 | 1 | 600 | 18 | 8,274 |
| 21 Printing and publishing, book and job. | 4 | 62,675 | | | 29,694 | 32,981 | 5 | 5 | 4,300 | 33 | 19,250 |
| 22 Printing and publishing, newspapers and periodicals. | 8 | 110,300 | 11,000 | 68,000 | 25,000 | 6,300 | 8 | 13 | 7,630 | 44 | 23,295 |
| 23 Saddlery and harness | 5 | 45,490 | 1,000 | 3,000 | 2,050 | 39,440 | 7 | 3 | 2,456 | 14 | 6,354 |
| 24 Tinsmithing, coppersmithing, and sheet-iron working. | 9 | 40,764 | 2,700 | 3,525 | 3,035 | 26,504 | 14 | | | 20 | 10,111 |
| 25 Tobacco, cigars and cigarettes | 17 | 34,325 | 2,750 | 9,225 | 3,115 | 19,235 | 18 | | | 20 | 6,581 |
| 26 Watch, clock, and jewelry repairing | 8 | 11,142 | | | 6,337 | 4,805 | 10 | 4 | 2,136 | 12 | 4,133 |
| 27 All other industries ¹ | 33 | 1,016,012 | 32,250 | 137,633 | 342,435 | 453,609 | 41 | 64 | 60,360 | 614 | 236,796 |

¹ Embraces bags, other than paper, 1; baskets, and rattan and willow ware, 1; bookbinding and blank book making, 1; boots and shoes, factory product, 1; bottling, 1; boxes, cigar, 1; brick and tile, 1; bridges, 1; brooms and brushes, 1; carpets, rag, 1; cars and general shop construction and repairs by steam railroad companies, 2; cheese, butter, and condensed milk, factory product, 1; cooperage, 1; dyeing and cleaning, 2; fruits and vegetables, canning and preserving, 1; furniture, cabinetmaking, repairing, and upholstering, 2; gas, illuminating and heating, 1; hand stamps, 1; ice, artificial, 1; liquors, malt, 1; lock and gun

TOPEKA.

| | | | | | | | | | | | |
|---|-----|-------------|-----------|-----------|-------------|-------------|-----|-----|-----------|-------|-------------|
| 1 All industries | 399 | \$3,391,530 | \$214,291 | \$367,930 | \$1,329,600 | \$1,479,709 | 472 | 319 | \$232,602 | 3,758 | \$2,110,721 |
| 2 Bicycle and tricycle repairing | 6 | 11,739 | | | 6,500 | 5,239 | 8 | | | 7 | 3,550 |
| 3 Blacksmithing and wheelwrighting | 26 | 16,615 | 4,500 | 3,550 | 3,375 | 4,630 | 30 | | | 31 | 14,579 |
| 4 Boots and shoes, custom work and repairing. | 22 | 6,290 | 540 | 680 | 2,330 | 1,740 | 23 | | | 8 | 2,518 |
| 5 Bread and other bakery products | 14 | 15,430 | 1,200 | 3,180 | 3,350 | 2,700 | 14 | 9 | 1,904 | 35 | 15,399 |
| 6 Brooms and brushes | 4 | 2,250 | | 100 | 650 | 1,500 | 5 | | | 5 | 2,150 |
| 7 Carpentering | 23 | 49,075 | 2,200 | 2,750 | 3,625 | 35,500 | 26 | 4 | 2,175 | 133 | 107,632 |
| 8 Carriages and wagons | 8 | 26,725 | 2,500 | 3,500 | 3,475 | 12,250 | 9 | | | 23 | 10,320 |
| 9 Clothing, men's, custom work and repairing. | 25 | 26,362 | | 750 | 3,399 | 22,713 | 27 | 1 | 1,320 | 67 | 26,391 |
| 10 Clothing, women's, dressmaking | 8 | 1,730 | | | 930 | 750 | 10 | 1 | | 36 | 7,224 |
| 11 Confectionery | 9 | 30,374 | 5,100 | 10,300 | 9,620 | 5,354 | 13 | 6 | 3,600 | 25 | 9,130 |
| 12 Druggists' preparations, not including prescriptions. | 3 | 1,350 | | | 50 | 1,300 | 4 | | | 1 | 200 |
| 13 Flouring and grist mill products | 10 | 725,372 | 19,700 | 136,700 | 221,342 | 347,630 | 11 | 45 | 51,974 | 135 | 70,942 |
| 14 Foundry and machine shop products | 7 | 123,025 | 19,400 | 24,800 | 47,000 | 31,825 | 7 | 5 | 2,432 | 31 | 40,316 |
| 15 Furniture, cabinetmaking, repairing, and upholstering. | 5 | 1,330 | | | 650 | | 6 | | | 4 | 1,330 |
| 16 Ice, artificial | 3 | 75,400 | 8,800 | 13,500 | 62,000 | 1,100 | 3 | 6 | 3,000 | 16 | 8,420 |

BY SPECIFIED INDUSTRIES: 1900—Continued.

KANSAS CITY—Continued.

| AVERAGE NUMBER OF WAGE-EARNERS AND TOTAL WAGES—continued. | | | | | | MISCELLANEOUS EXPENSES. | | | | | COST OF MATERIALS USED. | | | Value of products, including custom work and repairing. | |
|---|-----------|---------------------------|-----------|---------------------------|----------|-------------------------|----------------|--|---------------------------------|----------------|-------------------------|---|----------------------------------|---|----|
| Men, 16 years and over. | | Women, 16 years and over. | | Children, under 16 years. | | Total. | Rent of works. | Taxes, not including internal revenue. | Rent of offices, interest, etc. | Contract work. | Total. | Principal materials, including mill supplies and freight. | Fuel and rent of power and heat. | | |
| Average number. | Wages. | Average number. | Wages. | Average number. | Wages. | | | | | | | | | | |
| 5 | \$3,020 | | | | | \$332 | \$230 | \$25 | \$77 | | \$3,805 | \$3,685 | \$120 | \$9,950 | 27 |
| 5 | 4,600 | | | | | 1,409 | 923 | 94 | 302 | | 10,430 | 10,325 | 105 | 22,414 | 28 |
| 6,725 | 3,107,475 | 653 | \$190,198 | 281 | \$52,565 | 1,915,675 | 42,860 | 103,325 | 1,769,900 | | 64,575,866 | 64,265,037 | 310,829 | 73,205,027 | 29 |
| 49 | 31,272 | | | | | 8,786 | 720 | 226 | 2,700 | | 506,715 | 504,175 | 2,540 | 582,744 | 30 |
| 119 | 58,937 | 37 | 8,781 | 8 | 1,285 | 196,249 | 1,800 | 3,428 | 191,021 | | 652,150 | 637,415 | 14,735 | 1,020,337 | 31 |
| 59 | 36,789 | | | | | 3,789 | 2,424 | 414 | 901 | | 64,977 | 64,168 | 800 | 186,621 | 32 |
| 8 | 4,586 | | | | | 4,649 | 861 | 84 | 3,704 | | 9,440 | 9,414 | 26 | 27,470 | 33 |
| 6 | 2,567 | 1 | 275 | | | 2,054 | 1,357 | 70 | 627 | | 8,819 | 8,751 | 68 | 17,465 | 34 |
| 672 | 326,116 | 48 | 14,618 | 4 | 230 | 328,842 | 5,097 | 4,258 | 317,987 | \$1,500 | 1,659,712 | 1,603,859 | 55,853 | 2,843,743 | 35 |

where specified, 1; iron and steel, 1; lamps and reflectors, 2; lard, refined, 1; looking-glass and picture frames, 2; marble and stone work, 2; mineral and soda waters, 1; models and patterns, 1; monuments and tombstones, 1; oil, cottonseed and cake, 1; oleomargarine, 2; scales and balances, 1; sewing machine repairing, 1; steam packing, 1; tools, not elsewhere specified, 1.

LEAVENWORTH.

| | | | | | | | | | | | | | | | |
|-------|-----------|-----|----------|----|---------|-----------|----------|----------|-----------|----------|-------------|-------------|----------|-------------|----|
| 1,556 | \$796,777 | 140 | \$20,580 | 54 | \$7,219 | \$252,029 | \$32,228 | \$35,926 | \$137,543 | \$16,332 | \$2,822,127 | \$2,770,419 | \$51,703 | \$4,721,373 | 1 |
| 9 | 4,134 | | | | | 1,241 | 914 | 223 | 74 | 30 | 5,075 | 4,417 | 658 | 22,936 | 2 |
| | | | | | | 826 | 766 | 20 | 40 | | 1,550 | 1,550 | | 6,374 | 3 |
| 24 | 10,476 | 10 | 990 | 2 | 208 | 2,551 | 1,320 | 783 | 448 | | 42,884 | 40,423 | 2,461 | 80,121 | 4 |
| 106 | 56,693 | | | | | 21,306 | 472 | 152 | 132 | 20,550 | 155,928 | 155,920 | 8 | 279,545 | 5 |
| 58 | 23,146 | | | | | 7,326 | 960 | 885 | 5,481 | | 39,589 | 38,547 | 1,042 | 91,534 | 6 |
| 24 | 15,178 | 5 | 1,692 | | | 3,314 | 2,321 | 122 | 371 | | 17,044 | 16,953 | 91 | 48,210 | 7 |
| | | 45 | 8,484 | | | 722 | 668 | 43 | 11 | | 8,436 | 8,277 | 159 | 15,095 | 8 |
| 2 | 810 | 3 | 612 | | | 756 | 720 | 21 | 15 | | 502,446 | 555,263 | 7,183 | 8,440 | 9 |
| 55 | 26,610 | | | | | 16,097 | 280 | 1,322 | 14,495 | | 308,630 | 386,512 | 7,118 | 661,277 | 10 |
| 320 | 197,331 | | | | | 52,553 | 951 | 3,956 | 42,186 | 5,460 | | | | 810,715 | 11 |
| 132 | 47,176 | | | 27 | 3,040 | 16,404 | 1,333 | 1,185 | 1,823 | 12,063 | 118,212 | 110,636 | 2,576 | 235,843 | 12 |
| 6 | 3,050 | | | | | 570 | 120 | 200 | 250 | | 9,337 | 9,337 | | 18,440 | 13 |
| 30 | 16,350 | | | | | 51 | 32 | 32 | 19 | | 32,969 | 32,969 | | 57,980 | 14 |
| | | 23 | 10,017 | | | 5,934 | 3,560 | 271 | 2,103 | | 33,388 | 33,388 | | 77,578 | 15 |
| 7 | 3,140 | | | 1 | 182 | 558 | 240 | 127 | 191 | | 3,590 | 3,485 | 105 | 17,580 | 16 |
| 40 | 21,860 | | | 1 | 156 | 2,653 | 1,824 | 75 | 754 | | 23,105 | 23,105 | | 58,151 | 17 |
| 85 | 14,872 | | | | | 185 | 170 | 15 | 15 | | 14,627 | 14,127 | 500 | 34,727 | 18 |
| 8 | 1,950 | 2 | 150 | | | 1,303 | 804 | 22 | 477 | | 3,287 | 3,287 | | 14,850 | 19 |
| 17 | 8,144 | | | 1 | 130 | 1,262 | 480 | 308 | 474 | | 44,230 | 44,150 | 80 | 63,170 | 20 |
| 32 | 18,026 | 6 | 1,224 | | | 7,314 | 1,920 | 216 | 5,178 | | 28,776 | 22,935 | 841 | 70,500 | 21 |
| 41 | 22,355 | 2 | 760 | 1 | 180 | 9,075 | 780 | 1,154 | 5,707 | 1,434 | 21,538 | 19,979 | 1,559 | 69,166 | 22 |
| 14 | 6,354 | | | | | 1,795 | 1,322 | 175 | 298 | | 29,880 | 29,880 | | 48,528 | 23 |
| 19 | 9,961 | | | 1 | 150 | 2,070 | 828 | 263 | 979 | | 23,432 | 23,126 | 306 | 40,729 | 24 |
| 16 | 5,925 | | | 4 | 656 | 7,378 | 1,932 | 191 | 5,255 | | 18,411 | 13,411 | | 35,694 | 25 |
| 11 | 4,063 | | | 1 | 65 | 1,495 | 899 | 71 | 525 | | 2,524 | 2,402 | 122 | 16,937 | 26 |
| 655 | 278,593 | 44 | 5,751 | 15 | 2,452 | 87,290 | 6,314 | 23,939 | 50,242 | 6,795 | 1,207,730 | 1,180,831 | 26,899 | 1,837,203 | 27 |

smithing, 2; lumber, planing mill products, including sash, doors, and blinds, 1; mattresses and spring beds, 2; monuments and tombstones, 2; patent medicines and compounds, 1; plastering and stuccowork, 2; roofing and roofing materials, 1; slaughtering and meat packing, wholesale, 2; soup and candies, 1; vinegar and cider, 1.

TOPEKA.

| | | | | | | | | | | | | | | | |
|-------|-------------|-----|----------|----|---------|-----------|----------|----------|-----------|----------|-------------|-------------|-----------|-------------|----|
| 3,443 | \$2,040,237 | 291 | \$66,628 | 24 | \$3,856 | \$417,231 | \$67,882 | \$33,250 | \$242,111 | \$73,988 | \$6,023,034 | \$5,911,064 | \$112,870 | \$9,977,605 | 1 |
| 7 | 3,550 | | | | | 1,846 | 1,242 | 33 | 481 | 40 | 4,683 | 4,101 | 582 | 17,520 | 2 |
| 31 | 14,579 | | | | | 3,417 | 2,792 | 254 | 371 | | 11,769 | 10,673 | | 51,264 | 3 |
| 8 | 2,518 | | | | | 1,993 | 1,886 | 43 | 109 | | 6,650 | 6,401 | 249 | 19,720 | 4 |
| 32 | 14,849 | | | 3 | 550 | 4,335 | 2,994 | 201 | 1,190 | | 47,430 | 45,343 | 2,087 | 96,375 | 5 |
| 5 | 2,150 | | | | | 206 | 156 | 11 | 39 | | 6,985 | 6,916 | 69 | 13,040 | 6 |
| 188 | 107,632 | | | | | 60,203 | 1,422 | 276 | 955 | 57,550 | 223,839 | 223,365 | 474 | 440,735 | 7 |
| 26 | 10,330 | | | 2 | 570 | 2,624 | 1,231 | 354 | 514 | 525 | 16,649 | 16,132 | 517 | 43,524 | 8 |
| 46 | 21,853 | 21 | 5,038 | | | 7,552 | 6,137 | 184 | 1,231 | | 32,918 | 31,987 | 931 | 92,198 | 9 |
| 1 | 540 | 35 | 6,684 | | | 942 | 832 | | 110 | | 3,962 | 3,920 | 42 | 18,150 | 10 |
| 23 | 8,830 | 2 | 250 | | | 3,916 | 1,926 | 445 | 1,545 | | 31,512 | 30,535 | 977 | 69,280 | 11 |
| 1 | 200 | | | | | 730 | 200 | 10 | 520 | | 2,025 | 2,000 | 25 | 3,900 | 12 |
| 128 | 70,223 | 7 | 719 | | | 59,590 | 6,500 | 7,773 | 45,317 | | 1,920,467 | 1,896,895 | 23,562 | 2,188,031 | 13 |
| 90 | 40,536 | | | 1 | 280 | 5,523 | 1,130 | 1,398 | 3,000 | | 55,266 | 51,400 | 3,866 | 127,375 | 14 |
| 4 | 1,330 | | | | | 913 | 790 | 18 | 110 | | 3,760 | 3,700 | 60 | 9,370 | 15 |
| 16 | 8,420 | | | | | 3,320 | 240 | 580 | 2,500 | | 11,000 | 1,600 | 9,400 | 38,800 | 16 |

TABLE 8.—MANUFACTURES IN CITIES

TOPEKA—Continued.

| MANUFACTURING AND MECHANICAL INDUSTRIES. | Number of establishments. | CAPITAL. | | | | | Proprietors and firm members. | SALARIED OFFICIALS, CLERKS, ETC. | | AVERAGE NUMBER OF WAGE-EARNERS AND TOTAL WAGES. | |
|--|---------------------------|-----------|----------|------------|-----------------------------------|--------------------|-------------------------------|----------------------------------|-----------|---|-----------|
| | | Total. | Land. | Buildings. | Machinery, tools, and implements. | Cash and sundries. | | Number. | Salaries. | Total. | |
| | | | | | | | | | | Average number. | Wages. |
| 17 Lumber, planing mill products, including sash, doors, and blinds. | 3 | \$75,500 | \$10,500 | \$9,500 | \$17,500 | \$38,000 | 3 | 1 | \$1,500 | 73 | \$32,075 |
| 18 Masonry, brick and stone | 4 | 44,350 | | | 4,250 | 40,100 | 7 | | | 168 | 61,221 |
| 19 Mattresses and spring beds | 3 | 36,561 | 2,500 | 1,000 | 2,298 | 80,766 | 4 | 6 | 3,600 | 30 | 10,540 |
| 20 Millinery, custom work | 14 | 24,495 | | | 1,895 | 22,600 | 15 | 10 | 3,150 | 66 | 17,064 |
| 21 Painting, house, sign, etc | 22 | 18,010 | 100 | 100 | 3,785 | 14,025 | 26 | 4 | 1,575 | 57 | 31,212 |
| 22 Paper hanging | 3 | 6,250 | | | 400 | 5,850 | 5 | 2 | 330 | 14 | 9,000 |
| 23 Photography | 12 | 10,725 | | 865 | 5,910 | 4,450 | 13 | | | 10 | 3,564 |
| 24 Plastering and stucco work | 7 | 755 | 100 | 50 | 405 | 200 | 9 | | | 14 | 7,340 |
| 25 Plumbing, and gas and steam fitting | 9 | 45,252 | 2,350 | 4,100 | 2,950 | 95,852 | 16 | 2 | 1,100 | 57 | 32,840 |
| 26 Printing and publishing, book and job | 13 | 372,594 | 12,400 | 10,000 | 194,717 | 155,477 | 17 | 24 | 23,140 | 204 | 109,550 |
| 27 Printing and publishing, newspapers and periodicals. | 27 | 150,780 | 1,000 | 13,500 | 95,675 | 40,605 | 33 | 70 | 40,049 | 112 | 71,087 |
| 28 Saddlery and harness | 5 | 33,500 | 3,000 | 4,000 | 1,550 | 24,950 | 7 | 1 | 600 | 13 | 7,362 |
| 29 Tinsmithing, coppersmithing, and sheet-iron working. | 16 | 47,782 | 9,300 | 14,500 | 7,100 | 16,882 | 22 | 2 | 390 | 45 | 25,059 |
| 30 Tobacco, cigars and cigarettes | 16 | 28,460 | 725 | 650 | 2,302 | 24,783 | 17 | 4 | 2,664 | 63 | 28,544 |
| 31 Watch, clock, and jewelry repairing | 17 | 9,277 | | | 5,400 | 3,877 | 18 | | | 5 | 3,095 |
| 32 All other industries ¹ | 55 | 1,874,109 | 108,376 | 605,355 | 614,617 | 545,761 | 64 | 116 | 87,204 | 2,150 | 1,330,417 |

¹ Embraces agricultural implements, 1; awnings, tents, and sails, 1; baking and yeast powders, 1; bookbinding and blank book making, 1; boxes, cigar, 1; boxes, fancy and paper, 1; brick and tile, 1; carpets, rag, 1; cars and general shop construction and repairs by steam railroad companies, 1; cars and general shop construction and repairs by street railroad companies, 1; cheese, butter, and condensed milk, factory product, 1; clothing, men's, factory product, 1; dyeing and cleaning, 2; electrical construction and repairs, 2; flavoring extracts, 1; food preparations, 2; fruits and vegetables, canning and preserving, 1; fur goods, 1; gas, illuminating and heating, 1; hand stamps, 1; ironwork, architectural and ornamental, 1; lime and cement, 1; lock and gun smithing, 2; looking-glass and picture

WICHITA.

| | | | | | | | | | | | |
|--|-----|-------------|-----------|-----------|-----------|-----------|-----|-----|-----------|-------|-----------|
| 1 All industries | 328 | \$2,108,524 | \$202,513 | \$395,760 | \$715,963 | \$794,283 | 378 | 144 | \$110,935 | 1,505 | \$639,271 |
| 2 Awnings, tents, and sails | 3 | 1,470 | | | 450 | 1,020 | 3 | | | 4 | 1,050 |
| 3 Baking and yeast powders | 3 | 5,950 | | | 650 | 5,300 | 4 | | | 4 | 1,330 |
| 4 Bicycle and tricycle repairing | 6 | 6,090 | | 200 | 2,105 | 3,785 | 10 | 1 | 468 | 16 | 6,515 |
| 5 Blacksmithing and wheelwrighting | 27 | 17,918 | 6,800 | 4,250 | 4,195 | 2,673 | 33 | | | 24 | 12,595 |
| 6 Boots and shoes, custom work and repairing. | 20 | 5,935 | 2,100 | 750 | 1,690 | 1,395 | 22 | | | 8 | 1,250 |
| 7 Bread and other bakery products | 10 | 17,175 | 2,900 | 4,800 | 6,200 | 3,275 | 11 | 4 | 1,370 | 32 | 8,489 |
| 8 Carpentering | 17 | 12,368 | 1,118 | 1,000 | 4,250 | 6,000 | 21 | | | 146 | 55,823 |
| 9 Carriages and wagons | 3 | 11,159 | 3,000 | 1,500 | 770 | 5,889 | 4 | | | 19 | 8,420 |
| 10 Clothing, men's, custom work and repairing. | 18 | 32,450 | | | 3,330 | 29,120 | 20 | | | 67 | 27,547 |
| 11 Clothing, women's, dressmaking | 6 | 2,410 | | | 585 | 1,825 | 6 | | | 46 | 8,360 |
| 12 Confectionery | 7 | 52,930 | 2,500 | 2,500 | 26,830 | 21,050 | 9 | 7 | 12,500 | 70 | 19,992 |
| 13 Druggists' preparations, not including prescriptions. | 6 | 13,575 | 2,000 | 4,500 | 1,725 | 5,350 | 6 | 2 | 1,000 | 7 | 2,650 |
| 14 Flouring and grist mill products | 10 | 145,746 | 4,700 | 14,550 | 64,200 | 62,296 | 14 | 10 | 7,480 | 35 | 17,902 |
| 15 Foundry and machine shop products. | 8 | 64,634 | 3,150 | 7,450 | 21,856 | 32,173 | 10 | 6 | 2,526 | 41 | 18,730 |
| 16 Furniture, cabinetmaking, repairing, and upholstering. | 7 | 126,350 | 30,000 | 65,000 | 20,760 | 10,600 | 13 | | | 9 | 3,320 |
| 17 Lock and gun smithing | 4 | 7,050 | | | 1,625 | 5,525 | 4 | | | 5 | 2,500 |
| 18 Lumber, planing mill products, including sash, doors, and blinds. | 3 | 44,600 | 3,500 | 7,100 | 14,500 | 19,500 | 3 | 1 | 1,500 | 39 | 18,200 |
| 19 Masonry, brick and stone | 6 | 8,050 | | | 3,050 | 5,000 | 6 | | | 54 | 23,600 |
| 20 Millinery, custom work | 10 | 37,725 | | | 3,725 | 34,000 | 11 | 2 | 800 | 40 | 10,593 |
| 21 Mineral and soda waters | 3 | 5,725 | 100 | 25 | 4,100 | 1,500 | 4 | | | 6 | 1,700 |
| 22 Painting, house, sign, etc | 17 | 32,475 | 1,000 | 700 | 3,475 | 27,300 | 22 | 5 | 3,100 | 61 | 26,421 |
| 23 Patent medicines and compounds | 3 | 6,999 | 1,150 | 575 | 650 | 4,624 | 2 | 6 | 3,520 | 7 | 1,800 |
| 24 Paving and paving materials | 6 | 2,475 | | | 1,675 | 800 | 7 | | | 37 | 20,980 |
| 25 Photography | 8 | 6,980 | | 430 | 4,400 | 2,150 | 8 | | | 8 | 3,316 |
| 26 Plastering and stucco work | 3 | 350 | | | 350 | | 3 | | | 7 | 3,220 |
| 27 Plumbing, and gas and steam fitting | 6 | 21,650 | 4,500 | 5,000 | 2,450 | 9,700 | 10 | 1 | 100 | 20 | 10,000 |
| 28 Printing and publishing, book and job | 10 | 68,817 | 1,000 | 900 | 47,822 | 19,995 | 9 | 7 | 5,915 | 54 | 25,537 |
| 29 Printing and publishing, newspapers and periodicals. | 9 | 100,800 | 3,000 | 17,000 | 49,100 | 26,700 | 14 | 9 | 7,900 | 146 | 69,110 |
| 30 Saddlery and harness | 11 | 112,885 | 5,000 | 11,550 | 4,935 | 91,400 | 10 | 13 | 11,130 | 51 | 29,300 |
| 31 Tinsmithing, coppersmithing, and sheet-iron working. | 12 | 35,935 | 10,500 | 7,500 | 6,160 | 9,775 | 13 | | | 23 | 11,469 |
| 32 Tobacco, cigars and cigarettes | 11 | 15,560 | 800 | 1,200 | 960 | 12,600 | 14 | 1 | 200 | 18 | 7,695 |
| 33 Vinegar and cider | 3 | 12,338 | 500 | 4,100 | 5,050 | 2,638 | 4 | | | 5 | 1,330 |
| 34 Watch, clock, and jewelry repairing | 14 | 8,931 | | 75 | 5,406 | 3,450 | 12 | | | 12 | 6,232 |
| 35 All other industries ¹ | 38 | 1,055,019 | 109,095 | 233,105 | 396,994 | 325,825 | 36 | 69 | 51,426 | 389 | 171,742 |

¹ Embraces bottling, 2; boxes, fancy and paper, 1; boxes, wooden packing, 2; brick and tile, 1; bridges, 1; brooms and brushes, 2; cars and general shop construction and repairs by steam railroad companies, 2; cheese, butter, and condensed milk, factory product, 1; dyeing and cleaning, 2; electrical construction and repairs, 1; electroplating, 1; engraving, steel, including plate printing, 1; furniture, factory product, 1; gas, illuminating and heating, 1; hardware, 1; ice,

BY SPECIFIED INDUSTRIES: 1900—Continued.

TOPEKA—Continued.

| AVERAGE NUMBER OF WAGE-EARNERS AND TOTAL WAGES—continued. | | | | | | MISCELLANEOUS EXPENSES. | | | | | COST OF MATERIALS USED. | | | Value of products, including custom work and repairing. | |
|---|-----------|---------------------------|---------|---------------------------|--------|-------------------------|----------------|--|---------------------------------|----------------|-------------------------|---|----------------------------------|---|----|
| Men, 16 years and over. | | Women, 16 years and over. | | Children, under 16 years. | | Total. | Rent of works. | Taxes, not including internal revenue. | Rent of offices, interest, etc. | Contract work. | Total. | Principal materials, including mill supplies and freight. | Fuel and rent of power and heat. | | |
| Average number. | Wages. | Average number. | Wages. | Average number. | Wages. | | | | | | | | | | |
| 71 | \$81,775 | | | 2 | \$300 | \$3,899 | | \$438 | \$2,961 | | \$95,865 | \$98,926 | \$1,439 | \$156,400 | 17 |
| 168 | 61,221 | | | | | 4,070 | \$135 | 35 | 1,400 | \$2,500 | 99,625 | 99,575 | 50 | 186,100 | 18 |
| 24 | 9,375 | 6 | \$1,165 | | | 1,967 | 900 | 260 | 807 | | 55,255 | 55,255 | 705 | 77,920 | 19 |
| 57 | 31,212 | 66 | 17,064 | | | 8,748 | 7,164 | 301 | 1,283 | | 64,290 | 63,830 | 370 | 124,913 | 20 |
| 14 | 9,000 | | | | | 3,095 | 2,118 | 164 | 813 | | 22,892 | 22,720 | 172 | 83,850 | 21 |
| 4 | 1,610 | 6 | 1,951 | | | 1,262 | 675 | 25 | 562 | | 7,688 | 7,650 | 38 | 27,000 | 22 |
| 14 | 7,840 | | | | | 2,771 | 1,920 | 113 | 738 | | 8,210 | 7,619 | 591 | 27,286 | 23 |
| 87 | 82,840 | | | | | 155 | 24 | 16 | 15 | 100 | 11,383 | 11,383 | | 24,900 | 24 |
| 107 | 100,455 | 37 | 9,095 | | | 8,894 | 1,960 | 894 | 1,040 | 500 | 81,616 | 81,276 | 240 | 143,900 | 25 |
| 90 | 60,569 | 18 | 3,295 | 9 | 1,223 | 30,578 | 5,597 | 1,462 | 25,609 | | 152,178 | 148,296 | 3,882 | 369,181 | 26 |
| 13 | 7,362 | | | | | 44,189 | 5,295 | 1,405 | 25,416 | 12,078 | 79,656 | 75,708 | 3,948 | 360,003 | 27 |
| 44 | 24,984 | | | 1 | 75 | 1,469 | 576 | 237 | 606 | | 12,898 | 12,726 | 172 | 28,513 | 28 |
| 49 | 24,510 | 12 | 3,784 | 2 | 250 | 3,491 | 2,404 | 323 | 764 | | 48,321 | 47,659 | 662 | 104,520 | 29 |
| 6 | 3,085 | | | | | 14,802 | 2,424 | 283 | 12,095 | | 32,283 | 31,873 | 410 | 97,001 | 30 |
| 5 | 1,821,229 | 86 | 17,580 | 4 | 608 | 2,255 | 1,984 | 63 | 208 | | 3,824 | 3,640 | 184 | 20,200 | 31 |
| 2,000 | | | | | | 133,921 | 7,368 | 16,051 | 109,802 | 700 | 2,868,995 | 2,812,920 | 56,075 | 4,013,584 | 32 |

frames, 2; marble and stone work, 2; mineral and soda waters, 2; mirrors, 1; models and patterns, 1; monuments and tombstones, 2; oil, not elsewhere specified, 1; optical goods, 1; patent medicines and compounds, 1; paving and paving materials, 2; perfumery and cosmetics, 2; pickles, preserves, and sauces, 1; pumps, not including steam pumps, 2; roofing and roofing materials, 1; shirts, 1; slaughtering and meat packing, wholesale, 1; surgical appliances, 1; trunks and valises, 1; upholstering materials, 1; vinegar and cider, 1; windmills, 1.

WICHITA.

| | | | | | | | | | | | | | | | |
|-------|-----------|-----|----------|----|---------|-----------|----------|----------|----------|----------|-------------|-------------|----------|-------------|----|
| 1,284 | \$592,693 | 200 | \$42,810 | 21 | \$3,768 | \$176,146 | \$46,511 | \$10,833 | \$81,171 | \$37,631 | \$3,060,661 | \$3,014,051 | \$46,610 | \$1,724,068 | 1 |
| 2 | 550 | 2 | 500 | | | 331 | 300 | 6 | 75 | | 2,534 | 2,534 | | 5,800 | 2 |
| 3 | 1,630 | 1 | 200 | | | 559 | 375 | 15 | 169 | | 8,376 | 8,376 | 49 | 1,184 | 3 |
| 16 | 6,515 | | | | | 2,156 | 1,110 | 12 | 1,034 | | 5,677 | 5,358 | 319 | 28,000 | 4 |
| 24 | 12,565 | | | | | 2,213 | 1,589 | 854 | 270 | | 19,787 | 18,722 | 1,065 | 64,310 | 5 |
| 3 | 1,250 | | | | | 1,146 | 987 | 29 | 130 | | 8,087 | 7,925 | 162 | 21,949 | 6 |
| 21 | 6,640 | 11 | 1,849 | | | 3,968 | 2,354 | 234 | 1,380 | | 64,711 | 62,830 | 1,881 | 101,102 | 7 |
| 144 | 55,233 | | | 2 | 530 | 27,473 | 993 | 95 | 845 | 25,540 | 186,000 | 185,660 | 40 | 331,698 | 8 |
| 19 | 8,420 | | | | | 1,130 | 444 | 114 | 190 | | 6,607 | 6,392 | 215 | 18,655 | 9 |
| 51 | 23,677 | 14 | 3,600 | 2 | 270 | 6,665 | 5,012 | 138 | 1,515 | | 42,057 | 41,018 | 1,039 | 102,452 | 10 |
| | | 46 | 3,360 | | | 1,316 | 901 | | 415 | | 16,565 | 16,460 | 105 | 39,500 | 11 |
| 32 | 13,400 | 37 | 6,460 | 1 | 132 | 7,138 | 3,110 | 403 | 3,575 | 100 | 116,532 | 112,601 | 3,931 | 171,613 | 12 |
| 7 | 2,650 | | | | | 1,605 | 920 | 165 | 520 | | 7,023 | 6,370 | 653 | 19,378 | 13 |
| 35 | 17,902 | | | | | 8,234 | 310 | 1,564 | 6,360 | | 395,702 | 389,108 | 6,594 | 457,275 | 14 |
| 40 | 18,550 | | | 1 | 150 | 4,897 | 1,464 | 523 | 2,865 | 45 | 41,194 | 39,032 | 2,162 | 95,915 | 15 |
| 9 | 3,320 | | | | | 941 | 306 | 10 | 625 | | 2,925 | 2,850 | 75 | 14,372 | 16 |
| 5 | 2,500 | | | | | 899 | 746 | 13 | 80 | | 6,116 | 5,930 | 186 | 14,800 | 17 |
| 39 | 18,200 | | | | | 1,903 | 149 | 239 | 1,515 | | 42,111 | 41,441 | 670 | 79,000 | 18 |
| 54 | 28,600 | | | | | 9,345 | 485 | 20 | 240 | 8,600 | 54,160 | 53,960 | 200 | 99,840 | 19 |
| | | 40 | 10,593 | | | 5,243 | 3,660 | 818 | 1,265 | | 60,114 | 59,901 | 210 | 98,499 | 20 |
| 6 | 1,700 | | | | | 560 | 240 | 58 | 232 | | 2,288 | 2,188 | 100 | 10,740 | 21 |
| 59 | 26,068 | 1 | 200 | 1 | 156 | 4,432 | 2,881 | 129 | 1,347 | 75 | 42,821 | 42,726 | 95 | 99,616 | 22 |
| 3 | 1,000 | 4 | 800 | | | 1,608 | 60 | 58 | 1,490 | | 8,770 | 8,770 | 40 | 23,710 | 23 |
| 37 | 20,980 | | | | | 485 | 335 | | 150 | | 68,389 | 68,389 | | 95,056 | 24 |
| 6 | 3,010 | 2 | 306 | | | 1,323 | 1,180 | 11 | 537 | 100 | 9,160 | 8,995 | 165 | 21,925 | 25 |
| 7 | 3,220 | | | | | 153 | 148 | | 10 | | 4,305 | 4,305 | | 10,820 | 26 |
| 20 | 10,000 | | | | | 2,548 | 1,284 | 259 | 1,005 | | 39,175 | 38,800 | 375 | 65,832 | 27 |
| 50 | 24,619 | 3 | 768 | 1 | 150 | 4,953 | 2,951 | 576 | 931 | 500 | 39,846 | 38,105 | 1,741 | 96,237 | 28 |
| 134 | 65,680 | 9 | 3,076 | 3 | 354 | 12,314 | 490 | 770 | 9,577 | 1,977 | 34,946 | 33,306 | 1,640 | 168,301 | 29 |
| 51 | 29,300 | | | | | 4,210 | 2,173 | 667 | 1,370 | | 100,634 | 100,484 | 150 | 168,505 | 30 |
| 28 | 11,469 | | | | | 1,800 | 1,011 | 179 | 610 | | 20,906 | 20,408 | 498 | 51,572 | 31 |
| 17 | 7,570 | | | 1 | 125 | 6,544 | 1,270 | 330 | 4,944 | | 11,516 | 11,450 | 66 | 39,153 | 32 |
| 4 | 1,230 | 1 | 150 | | | 371 | 56 | 110 | 205 | | 13,235 | 12,615 | 620 | 24,856 | 33 |
| 9 | 5,309 | 1 | 520 | 2 | 412 | 3,017 | 1,935 | 237 | 815 | | 7,655 | 7,655 | 175 | 26,837 | 34 |
| 354 | 104,325 | 28 | 5,428 | 7 | 1,489 | 48,611 | 5,282 | 3,167 | 34,850 | 312 | 1,570,546 | 1,549,027 | 21,519 | 2,031,866 | 35 |

artificial, 2; ironwork, architectural and ornamental, 1; jewelry, 2; labels and tags, 1; lithographing and engraving, 1; looking-glass and picture frames, 1; mattresses and spring beds, 1; monuments and tombstones, 2; sewing machines and attachments, 1; shirts, 1; slaughtering and meat packing, wholesale, 1; soap and candles, 2; trunks and valises, 1; wirework, including wire rope and cable, 1.

TABLE 9.—MANUFACTURES IN CITIES

| CITIES. | Number of establishments. | CAPITAL. | | | | | Proprietors and firm members. | SALARIED OFFICIALS, CLERKS, ETC. | | AVERAGE NUMBER OF WAGE-EARNERS AND TOTAL WAGES. | |
|--------------------|---------------------------|--------------|-------------|-------------|----------------------------------|--------------------|-------------------------------|----------------------------------|-----------|---|-------------|
| | | Total. | Land. | Buildings. | Machinery, tools and implements. | Cash and sundries. | | Number. | Salaries. | Total. | |
| | | | | | | | | | | Average number. | Wages. |
| 1 Total for cities | 2,100 | \$23,393,343 | \$1,154,485 | \$6,141,177 | \$8,122,139 | \$6,920,542 | 2,431 | 666 | \$446,460 | 10,493 | \$4,757,085 |
| 2 Abilene | 70 | 232,181 | 10,271 | 35,125 | 55,595 | 181,190 | 79 | 59 | 20,320 | 192 | 63,251 |
| 3 Argentine | 45 | 10,753,128 | 270,744 | 3,530,085 | 4,459,926 | 2,492,373 | 51 | 42 | 20,739 | 741 | 436,228 |
| 4 Arkansas City | 74 | 677,649 | 17,835 | 237,269 | 147,143 | 275,402 | 74 | 39 | 30,474 | 319 | 151,963 |
| 5 Atchison | 111 | 1,139,313 | 76,800 | 173,950 | 318,386 | 572,177 | 127 | 53 | 39,738 | 881 | 416,816 |
| 6 Chanute | 54 | 98,291 | 18,500 | 14,405 | 35,750 | 34,606 | 65 | 5 | 4,600 | 154 | 71,627 |
| 7 Chetopa | 30 | 87,296 | 4,920 | 12,555 | 24,010 | 15,811 | 36 | 1 | 300 | 27 | 9,524 |
| 8 Clay Center | 54 | 179,558 | 89,150 | 20,900 | 39,945 | 79,563 | 60 | 9 | 3,751 | 71 | 25,111 |
| 9 Coffeyville | 64 | 406,444 | 28,280 | 77,290 | 170,012 | 130,862 | 71 | 25 | 19,294 | 417 | 148,323 |
| 10 Concordia | 48 | 98,619 | 10,400 | 15,875 | 30,150 | 42,194 | 56 | 3 | 1,820 | 98 | 49,579 |
| 11 Emporia | 77 | 232,606 | 13,350 | 39,750 | 181,489 | 48,017 | 89 | 5 | 3,300 | 224 | 101,720 |
| 12 Fort Scott | 97 | 676,097 | 71,798 | 93,770 | 285,161 | 224,368 | 104 | 32 | 29,496 | 535 | 255,563 |
| 13 Galena | 61 | 174,028 | 16,975 | 29,125 | 48,955 | 79,573 | 86 | 6 | 4,963 | 182 | 92,334 |
| 14 Girard | 37 | 123,310 | 8,140 | 26,160 | 42,334 | 46,716 | 47 | 6 | 2,572 | 218 | 87,445 |
| 15 Hiawatha | 45 | 111,280 | 21,830 | 23,290 | 25,635 | 40,525 | 55 | 1 | 500 | 84 | 34,256 |
| 16 Holton | 60 | 163,649 | 25,850 | 30,650 | 40,960 | 66,189 | 71 | 13 | 5,280 | 104 | 86,347 |
| 17 Horton | 40 | 589,952 | 10,985 | 150,832 | 44,029 | 378,106 | 48 | 22 | 19,860 | 374 | 196,386 |
| 18 Hutchinson | 140 | 1,151,138 | 78,125 | 318,149 | 364,226 | 390,638 | 176 | 47 | 35,476 | 703 | 270,433 |
| 19 Independence | 61 | 210,375 | 8,175 | 35,430 | 82,720 | 84,050 | 67 | 12 | 6,910 | 183 | 62,558 |
| 20 Junction | 66 | 229,677 | 18,450 | 66,300 | 58,780 | 86,147 | 92 | 3 | 2,400 | 184 | 83,776 |
| 21 Lawrence | 128 | 875,638 | 45,800 | 177,400 | 326,382 | 326,056 | 138 | 86 | 46,109 | 646 | 335,189 |
| 22 McPherson | 35 | 138,602 | 6,950 | 39,800 | 35,932 | 55,920 | 40 | 7 | 3,200 | 67 | 26,410 |
| 23 Manhattan | 50 | 126,820 | 17,105 | 32,455 | 37,103 | 40,157 | 60 | 8 | 4,770 | 82 | 31,382 |
| 24 Newton | 76 | 368,413 | 20,600 | 65,635 | 157,758 | 124,420 | 91 | 23 | 18,441 | 404 | 201,415 |
| 25 Olathe | 50 | 125,780 | 11,050 | 23,300 | 46,350 | 46,080 | 61 | 2 | 1,004 | 140 | 60,676 |
| 26 Osawatimic | 29 | 168,468 | 21,930 | 15,450 | 50,933 | 80,150 | 34 | 16 | 15,276 | 418 | 250,746 |
| 27 Ottawa | 67 | 334,970 | 39,900 | 88,925 | 148,345 | 57,800 | 72 | 9 | 9,041 | 341 | 179,551 |
| 28 Paola | 50 | 134,660 | 14,825 | 24,725 | 45,555 | 49,555 | 56 | 3 | 1,509 | 110 | 38,784 |
| 29 Parsons | 83 | 584,706 | 39,850 | 114,900 | 241,238 | 188,718 | 90 | 17 | 11,629 | 631 | 292,237 |
| 30 Pittsburg | 82 | 808,055 | 90,665 | 283,435 | 262,854 | 171,101 | 87 | 28 | 27,037 | 994 | 475,772 |
| 31 Salina | 119 | 634,938 | 55,350 | 153,103 | 161,724 | 264,811 | 134 | 58 | 31,734 | 337 | 132,761 |
| 32 Weir | 22 | 145,171 | 4,425 | 88,080 | 39,855 | 12,811 | 23 | 2 | 1,000 | 123 | 40,686 |
| 33 Winfield | 75 | 588,481 | 42,057 | 98,069 | 162,899 | 285,456 | 91 | 26 | 25,026 | 209 | 86,352 |

UNDER 20,000 IN POPULATION: 1900.

| AVERAGE NUMBER OF WAGE-EARNERS AND TOTAL WAGES—continued. | | | | | | MISCELLANEOUS EXPENSES. | | | | | COST OF MATERIALS USED. | | | Value of products, including custom work and repairing. | |
|---|-------------|---------------------------|-----------|---------------------------|----------|-------------------------|----------------|--|---------------------------------|----------------|-------------------------|---|----------------------------------|---|----|
| Men, 16 years and over. | | Women, 16 years and over. | | Children, under 16 years. | | Total. | Rent of works. | Taxes, not including internal revenue. | Rent of offices, interest, etc. | Contract work. | Total. | Principal materials, including mill supplies and freight. | Fuel and rent of power and heat. | | |
| Average number. | Wages. | Average number. | Wages. | Average number. | Wages. | | | | | | | | | | |
| 9,223 | \$4,505,634 | 1,111 | \$234,202 | 159 | \$18,149 | \$1,030,696 | \$197,748 | \$104,587 | \$653,852 | \$74,500 | \$20,808,144 | \$20,238,848 | \$574,296 | \$43,889,022 | 1 |
| 161 | 58,499 | 24 | 3,687 | 7 | 1,065 | 26,587 | 3,672 | 1,804 | 20,011 | 1,100 | 865,596 | 857,697 | 7,999 | 534,619 | 2 |
| 784 | 434,752 | 5 | 1,312 | 2 | 162 | 118,218 | 1,611 | 8,056 | 108,551 | | 15,016,721 | 14,918,629 | 103,092 | 20,337,170 | 3 |
| 289 | 146,039 | 20 | 4,892 | 10 | 1,032 | 68,277 | 6,908 | 10,619 | 50,095 | | 725,861 | 706,537 | 19,324 | 1,078,555 | 4 |
| 724 | 384,214 | 146 | 30,162 | 11 | 1,440 | 97,926 | 17,019 | 7,719 | 68,188 | 5,000 | 1,699,953 | 1,667,587 | 32,366 | 2,600,469 | 5 |
| 122 | 69,490 | 81 | 8,009 | 1 | 128 | 9,224 | 4,832 | 701 | 3,491 | 200 | 182,216 | 120,998 | 2,218 | 280,370 | 6 |
| 19 | 8,300 | 8 | 1,224 | | | 8,332 | 1,729 | 631 | 920 | 52 | 71,704 | 70,170 | 1,534 | 112,789 | 7 |
| 49 | 21,696 | 18 | 3,203 | 4 | 407 | 11,809 | 4,453 | 1,223 | 5,928 | 200 | 182,221 | 179,180 | 3,041 | 270,283 | 8 |
| 377 | 140,772 | 38 | 7,835 | 2 | 216 | 42,900 | 5,292 | 4,378 | 26,930 | 6,300 | 697,955 | 671,974 | 25,981 | 1,066,386 | 9 |
| 85 | 41,228 | 12 | 2,216 | 1 | 96 | 8,081 | 3,079 | 353 | 4,149 | | 153,610 | 149,420 | 4,190 | 254,570 | 10 |
| 187 | 92,969 | 31 | 8,290 | 6 | 461 | 29,361 | 9,608 | 2,048 | 11,205 | 6,500 | 234,994 | 230,726 | 4,269 | 474,519 | 11 |
| 470 | 239,994 | 64 | 15,664 | 1 | 145 | 39,630 | 10,086 | 4,135 | 24,313 | 1,086 | 475,668 | 462,316 | 13,352 | 943,018 | 12 |
| 161 | 83,220 | 13 | 4,318 | 3 | 206 | 12,806 | 5,480 | 332 | 6,294 | 200 | 373,520 | 366,211 | 7,309 | 563,697 | 13 |
| 191 | 82,845 | 22 | 4,397 | 5 | 703 | 23,133 | 7,746 | 1,430 | 13,532 | 375 | 402,568 | 380,420 | 22,148 | 511,809 | 14 |
| 68 | 29,511 | 16 | 4,745 | | | 9,375 | 3,429 | 912 | 3,994 | 1,540 | 85,822 | 83,374 | 1,948 | 133,316 | 15 |
| 79 | 32,060 | 23 | 4,184 | 2 | 153 | 11,021 | 3,673 | 1,172 | 5,059 | 1,117 | 88,039 | 85,897 | 2,142 | 201,585 | 16 |
| 355 | 193,505 | 14 | 2,352 | 5 | 529 | 12,721 | 2,309 | 7,325 | 2,188 | 899 | 291,331 | 284,686 | 6,645 | 555,024 | 17 |
| 614 | 259,927 | 36 | 18,850 | 3 | 411 | 81,740 | 16,326 | 7,621 | 57,463 | 330 | 1,216,951 | 1,096,893 | 120,118 | 1,907,370 | 18 |
| 118 | 52,319 | 45 | 8,365 | 20 | 1,974 | 14,490 | 3,232 | 1,303 | 9,875 | 20 | 258,555 | 253,849 | 4,706 | 416,991 | 19 |
| 145 | 77,461 | 30 | 5,388 | 9 | 927 | 13,252 | 5,105 | 1,683 | 6,064 | 400 | 449,507 | 446,398 | 3,109 | 652,861 | 20 |
| 776 | 301,601 | 157 | 32,038 | 13 | 1,550 | 67,859 | 17,854 | 6,909 | 41,921 | 1,175 | 1,174,357 | 1,148,821 | 30,536 | 1,842,199 | 21 |
| 55 | 24,441 | 12 | 1,969 | | | 7,270 | 1,985 | 953 | 4,321 | 20 | 246,030 | 239,895 | 6,735 | 380,714 | 22 |
| 64 | 27,725 | 18 | 3,657 | | | 9,468 | 3,781 | 1,176 | 4,411 | 90 | 142,411 | 138,614 | 3,797 | 253,963 | 23 |
| 373 | 193,674 | 30 | 5,596 | 1 | 145 | 33,751 | 8,026 | 4,133 | 13,717 | 12,875 | 652,370 | 639,209 | 13,661 | 982,475 | 24 |
| 111 | 52,866 | 19 | 6,210 | 10 | 1,600 | 29,456 | 3,982 | 1,137 | 7,237 | 17,050 | 170,356 | 166,614 | 3,742 | 339,098 | 25 |
| 412 | 249,936 | 4 | 639 | 2 | 171 | 6,360 | 1,885 | 2,023 | 2,252 | 250 | 356,038 | 352,518 | 3,520 | 649,050 | 26 |
| 314 | 173,691 | 24 | 5,610 | 3 | 250 | 13,789 | 5,525 | 2,905 | 5,059 | 300 | 406,584 | 399,107 | 7,477 | 734,965 | 27 |
| 86 | 34,944 | 24 | 3,840 | | | 16,729 | 4,391 | 1,539 | 10,749 | | 223,237 | 219,839 | 3,398 | 351,297 | 28 |
| 570 | 282,145 | 52 | 9,116 | 9 | 976 | 34,325 | 10,907 | 3,343 | 20,076 | | 531,447 | 519,247 | 12,200 | 1,025,409 | 29 |
| 946 | 466,147 | 36 | 8,443 | 12 | 1,182 | 45,654 | 6,833 | 7,673 | 31,143 | | 986,328 | 929,581 | 57,247 | 1,616,976 | 30 |
| 263 | 119,465 | 58 | 11,560 | 13 | 1,736 | 94,333 | 10,030 | 3,334 | 63,539 | 17,330 | 885,153 | 869,246 | 15,907 | 1,329,985 | 31 |
| 110 | 47,661 | 10 | 1,721 | 8 | 304 | 7,967 | 1,010 | 1,648 | 5,309 | | 240,614 | 228,990 | 11,624 | 311,654 | 32 |
| 190 | 82,037 | 18 | 4,725 | 1 | 90 | 24,343 | 5,320 | 3,264 | 15,219 | 40 | 869,327 | 849,866 | 19,461 | 1,136,346 | 33 |

CENSUS BULLETIN.

No. 116.

WASHINGTON, D. C.

November 29, 1901.

MANUFACTURES.

SALT.

Hon. WILLIAM R. MERRIAM,
Director of the Census.

SIR: I transmit herewith a report on the manufacture of salt during the calendar year 1899, prepared under my direction by Mr. Edward W. Parker, of the United States Geological Survey, acting in the capacity of an expert special agent of the division of manufactures of the Census Office.

Salt production has always been regarded for census purposes as a manufacturing industry, although in some of its features it is more closely allied to mining. The total cost of materials, for example, appears small, since the most important material is extracted chiefly from the earth, purchased materials being confined to mill supplies, and cases, bags, barrels, etc., used for packing.

Salt manufacture is, in fact, one of the large group of industries which lie on the border line, either between manufacturing and mining, as in this case, or between manufacturing and agriculture, as in the case of slaughtering and meat packing, or of canning fruits and vegetables. The products of these crude manufacturing industries greatly swell the value of the manufactured product as reported by the census, and it will be the endeavor of the division of manufactures of the Twelfth Census, in presenting the complete statistics, so to separate and classify them that all of these border-line industries can be grouped and eliminated by those who desire to do so.

The statistics are presented in 6 tables: Table 1 showing comparative figures for the industry at the several censuses; Table 2 showing the quantities of each kind of salt manufactured in the census years 1880, 1890, and 1900, and the total quantities shown by the censuses from 1850 to 1900; Table 3 showing, by states and territories, the number and size of covers or ponds and the number of grainers, open pans, kettles, and vacuum pans in use; Table 4 showing the quantity of salt manufactured, by states and territo-

ries, in 1890 and 1899; Table 5 showing the salt production of the Onondaga district, New York, for one hundred years; and Table 6 showing the detailed statistics for the industry in 1899, by states and territories.

Table 1 shows the growth of the industry for the half century which terminates with the Twelfth Census. The manufacturing statistics of the censuses prior to 1850 were too imperfect and fragmentary in character to make it proper to reproduce them in such a table as a measure of industrial growth in the first half of the century. Owing to changes in the method of taking the census, comparisons between the earlier and later decades, represented in Table 1, should be drawn only in the most general way. Nevertheless, the rate of growth in the manufacture of salt may be fairly inferred from the figures given.

In drafting the schedules of inquiry for the census of 1900 care was taken to preserve the basis of comparison with prior censuses. Comparison may be made safely with respect to all the items of inquiry except those relating to capital, salaried officials, clerks, etc., and their salaries, the average number of employees, and the total amount of wages paid. Live capital, that is, cash on hand, bills receivable, unsettled ledger accounts, raw materials, stock in process of manufacture, finished products on hand, and other sundries, was first called for at the census of 1890. No definite attempt was made, prior to the census of 1890, to secure a return of live capital invested.

Changes were made in the inquiries relating to employees and wages in order to eliminate defects found to exist on the form of inquiry adopted in 1890. At the census of 1890 the average number of persons employed during the entire year was called for, and also the average number employed at stated weekly rates of pay, and the average number was computed for the actual time the establishments were reported as being in operation. At the

census of 1900 the greatest and least numbers of employees were reported, and also the average number employed during each month of the year. The average number of wage-earners (men, women, and children) employed during the entire year was ascertained by using 12, the number of calendar months, as a divisor into the total of the average numbers reported for each month. This difference in the method of ascertaining the average number of wage-earners during the entire year may have resulted in a variation in the number, and should be considered in making comparisons.

At the census of 1890 the number and salaries of proprietors and firm members actively engaged in the business or in supervision were reported, combined with clerks and other officials. In cases where proprietors and firm members were reported without salaries, the amount that would ordinarily be paid for similar services was estimated. At the census of 1900 only the number of proprietors and firm members actively engaged in the industry or in supervision was ascertained, and no salaries were reported for this class. It is therefore impossible to compare the number and salaries of salaried officials of any character for the two censuses.

Furthermore, the schedules for 1890 included in the wage-earning class, overseers, foremen, and superintendents (not general superintendents or managers), while the census of 1900 separates from the wage-earning class such salaried employees as general superintendents, clerks, and salesmen. It is possible and probable that this change in the form of the question has resulted in eliminating from the wage-earners, as reported by the present census, many

high-salaried employees included in that group for the census of 1890.

The reports show a capital of \$27,123,364 invested in the manufacture of salt in the 159 establishments reporting for the country. This sum represents the value of land, buildings, machinery, tools, and implements, and the live capital utilized, but does not include the capital stock of any of the manufacturing corporations engaged in this industry. The value of the products is returned at \$7,966,897, to produce which involved an outlay of \$499,748 for salaries of officials, clerks, etc.; \$1,911,140 for wages; \$760,539 for miscellaneous expenses, including rent, taxes, etc.; and \$3,335,922 for materials used, mill supplies, freight, and fuel. It is not to be assumed, however, that the difference between the aggregate of these sums and the value of the products is, in any sense, indicative of the profits in the manufacture of salt during the census year. The census schedule takes no cognizance of the cost of selling manufactured articles, or of interest on capital invested, or of the mercantile losses incurred in the business, or of depreciation in plant. The value of the product given is the value as obtained or fixed at the works. This statement is necessary in order to avoid erroneous conclusions from the figures presented.

Very respectfully,



Chief Statistician for Manufactures.

SALT.

By EDWARD W. PARKER, *Expert Special Agent.*

It has been the custom in United States census inquiry to include salt production among manufacturing industries. Salt itself is a mineral, but it is not clear whether the process by which it is obtained should be regarded as manufacturing or as a method of mining. Rock salt is undoubtedly a mining product, but as it is considered in connection with salt manufacture by artificial heat or by solar evaporation, it is included in the present report. Salt is the only mineral product which enters directly into consumption as food, and while a considerable quantity is used for other purposes, by far the larger portion is consumed as food either directly or indirectly.

The history of the manufacture in this country covers the entire period subsequent to the early settlement by the English. The first salt was produced in Virginia prior to 1620, and in the various reports of the Federal Census mention is made of not less than 32 states in which salt has at some period been produced in considerable quantities. The early process consisted in the production from sea water, either by exposure to evaporation under the sun's rays, or sometimes by boiling in pans or kettles until the dissolved salt was deposited. About the close of the Eighteenth century the manufacture was begun from brine obtained from natural salt springs, following the same crude processes used in the manufacture of salt from sea water.

At the present time, however, comparatively little salt is made from sea water, or brine from natural springs, and some of that so obtained is evaporated by artificial heat. Nearly all the evaporated salt is now obtained by sinking wells to the salt body, pumping fresh water into the wells, and withdrawing the brine after it has become well saturated. Practically all the product from natural salt water, by solar evaporation is made along the shores of San Francisco Bay in California, and Great Salt Lake, Utah. With these two exceptions the evaporated product is almost entirely obtained from deep wells.

Salt manufactured by artificial heat is made in kettles, open pans, vacuum pans, and grainers, the heat being applied either directly or by steam. In blocks where kettles or open pans are used, the heat is usually applied directly

and the brine is boiled. In grainers and vacuum pans steam heat is used. The grainer process is essentially American; the brine in this process is evaporated from rectangular vats about 12 inches deep, in which are suspended coils of pipe carrying either live or exhaust steam, according to local conditions. The brine is usually kept agitated mechanically, so that the salt which is formed on top will be broken up and precipitated. In some instances the salt is removed from the bottom of the pan by mechanical scrapers; in others, hand labor is employed. The grainer process seems to be the most popular method in the United States and most of the finer grades of table and dairy salts are produced either by this or by the vacuum-pan process.

Solar salt is made in vats or ponds, covered and uncovered. At Syracuse, N. Y., the ponds are supplied with movable covers. No covers are used in Utah or California, as the operations in those states continue only during the dry season.

Rock salt is mined and prepared for use in the states of New York, Kansas, Louisiana, and California. It is now produced in greater quantities than solar salt. A more extended presentation of the method of mining rock salt follows in the description of salt manufacture in Kansas.

Four different units of measure are employed in the industry. At the solar salt works, Syracuse, N. Y., and at some of the salt blocks along the Ohio River in Ohio and West Virginia, the bushel of 56 pounds is used as the unit. At the rock salt mines in New York state, and at Avery Island rock salt mines in Louisiana, the long ton of 2,240 pounds is used as the unit, while the short ton of 2,000 pounds is the usual unit at the rock salt mines in Kansas and at the solar works along the shores of San Francisco Bay and Great Salt Lake. In nearly every other instance the barrel of 280 pounds is adopted. In the compilation of this report the barrel of 280 pounds net is used as the unit, and when the quantities have been reported in other units of measurement they have been reduced accordingly.

Table 1 shows the totals for the industry as returned at the censuses of 1850 to 1900, inclusive, with the percentages of increase for each decade.

TABLE 1.—COMPARATIVE SUMMARY, 1850 TO 1900, WITH PER CENT OF INCREASE FOR EACH DECADE.

| | DATE OF CENSUS. | | | | | | PER CENT OF INCREASE. | | | | |
|---|-----------------|--------------|-------------|-------------|-------------|-------------|-----------------------|--------------|--------------|--------------|--------------|
| | 1900 | 1890 | 1880 | 1870 | 1860 | 1850 | 1890 to 1900 | 1880 to 1890 | 1870 to 1880 | 1860 to 1870 | 1850 to 1860 |
| Number of establishments | 159 | 200 | 268 | 282 | 399 | 340 | 20.5 | 25.4 | 5.0 | 29.8 | 17.4 |
| Capital | \$27,123,364 | \$13,437,749 | \$8,225,740 | \$6,561,615 | \$3,692,215 | \$2,640,885 | 101.8 | 63.4 | 25.4 | 77.7 | 39.8 |
| Land | \$3,494,537 | \$4,237,784 | (3) | (3) | (3) | (3) | 98.1 | | | | |
| Buildings | \$3,853,013 | \$4,255,866 | (8) | (8) | (8) | (8) | 96.4 | | | | |
| Machinery, tools, and implements | \$4,523,234 | \$2,703,863 | (3) | (3) | (3) | (3) | 67.3 | | | | |
| Cash and sundries | \$5,747,465 | \$2,190,201 | (8) | (8) | (8) | (8) | 162.4 | | | | |
| Salaries of officials, clerks, etc., number | 406 | 200 | (8) | (8) | (8) | (8) | 103.0 | | | | |
| Salaries | \$499,748 | \$189,049 | (8) | (8) | (8) | (8) | 164.3 | | | | |
| Wage-earners, average number | 4,774 | 4,255 | 4,289 | 2,053 | 2,213 | 2,786 | 12.2 | 0.8 | 45.2 | 33.4 | 20.6 |
| Total wages | \$1,911,140 | \$1,593,442 | \$1,260,023 | \$1,146,910 | \$371,954 | \$751,224 | 19.9 | 26.5 | 9.9 | 208.8 | 50.7 |
| Miscellaneous expenses | \$760,589 | \$674,183 | (4) | (4) | (4) | (4) | 12.8 | | | | |
| Cost of materials used | \$3,335,922 | \$1,826,770 | \$2,074,049 | \$1,760,670 | \$1,054,780 | \$1,051,425 | 82.6 | 11.9 | 17.8 | 66.9 | 0.3 |
| Value of products | \$7,966,897 | \$5,484,618 | \$4,829,566 | \$4,818,229 | \$2,289,504 | \$2,222,745 | 45.3 | 13.6 | 0.2 | 110.4 | 3.0 |

¹ The report for the Twelfth Census is for the calendar year 1899.

² Decrease.

³ Not separately reported.

⁴ Not reported.

⁵ Exclusive of 4,520,796 barrels of salt valued at \$1,171,948, an intermediate product in the manufacture of chemicals, and included in the report of that industry.

⁶ Includes products other than salt to the value of \$65,001.

⁷ Includes products other than salt to the value of \$43,315.

Table 1 shows that the production of salt in the United States has increased continuously since 1850. In the half century from 1850 to 1900 the capital increased from \$2,640,885 to \$27,123,364, while the value of products increased from \$2,222,745 to \$7,966,897. In contrast with the increase in capital and products, the number of establishments shows a marked decrease since 1860. At the census of 1860 there were 399 establishments, while only 159 are shown at the census of 1900, a decrease of 60.2 per cent. During the last twenty years the development of the industry has been most rapid, the capital having increased from \$8,225,740 to \$27,123,364, a gain of 229.7 per cent. The products in the same period increased from \$4,829,566 to \$7,966,897, or 65 per cent, while the number of establishments decreased from 268 to 159, a loss of 40.7 per cent. The decrease in the number of establishments is due to the abandonment of many small plants along the Atlantic coast and in some of the interior districts where salt was manufactured from brine springs; also to the consolidation of a number of large establishments, particularly in New York, Ohio, Michigan, Kansas, Utah, and California.

From 1890 to 1899 the number of establishments decreased from 200 to 159, or 20.5 per cent. The capital increased from \$13,437,749 to \$27,123,364, or 101.8 per cent, and of this increase the greatest gain was shown in the item of live capital which increased from \$2,190,201 to \$5,747,465, or 162.4 per cent.

The cost of materials increased from \$1,826,770 in 1890 to \$3,335,922 in 1899, or 82.6 per cent. The cost of the barrels, boxes, cartons, bags, cooperage stock, and cloth for sacks purchased, amounting in 1899 to \$1,837,122, formed the most important factor in the cost of materials.

The next most important item of expense was that for fuel, which, in 1899, amounted to \$991,248. The expense for fuel in 1890 was \$745,917. No separation was made of any of the other items included in the cost of materials in 1890. For 1899, besides the cost of packages and fuel, the following items were separately reported: mill sup-

plies, \$192,777; rent of power and heat, \$2,111; all other materials, \$189,747; and freight, \$122,917; a total of \$507,552. While the cost of fuel, \$991,248, represents the amount actually reported for this item of expense in 1899, there are also large quantities of fuel consumed, particularly in Michigan, where salt blocks are operated in connection with the manufacture of lumber, the salt operations being carried on largely to utilize sawdust and other waste. In such cases nothing is reported for the cost of fuel. The detailed statistics as to materials used and miscellaneous expenses are presented in Table 6.

In 1890 the value of products was \$5,484,618, and in 1899, \$7,966,897, an increase of 45.3 per cent. In general, however, owing to a decline in the price of salt, the increase in the value of the product does not adequately represent the growth of the industry. A better index of growth is afforded by the quantity produced, which, as presented in Table 2, shows an increase of 30.2 per cent from 1850 to 1860, 38.4 per cent from 1860 to 1870, 69.3 per cent from 1870 to 1880, 74.6 per cent from 1880 to 1890, and 45.9 per cent from 1890 to 1899. Comparison with the corresponding figures for the value of salt (see Table 1) shows that the price declined continuously until 1890, except during the decade from 1860 to 1870, when the quantity increased 38.4 per cent, while the value rose 110.4 per cent. It should be remembered, however, that values in 1870 were expressed in a currency which was at a discount in gold, and should, therefore, be reduced about one-fifth for purposes of comparison with other census years.

In 1899, in addition to the 159 active establishments, 10 idle establishments were reported, with a capital of \$1,737,150.

Table 2 presents a comparative statement of the quantity of salt manufactured by the various processes, as reported at the censuses of 1880, 1890, and 1900, with the percentage that each constitutes of the total; and also a statement of the total quantity reported at each census from 1850 to 1900, inclusive.

TABLE 2.—QUANTITY OF EACH KIND OF SALT MANUFACTURED, AND PER CENT OF TOTAL.

| KINDS OF SALT. | 1870 | | 1880 | | 1890 | | 1900 | | 1910 | |
|----------------------------------|--------------------|--------------------|--------------------|--------------------|--------------------|--------------------|--------------------|--------------------|--------------------|--------------------|
| | Quantity, barrels. | Per cent of total. |
| Total | 15,187,819 | 100.0 | 10,406,860 | 100.0 | 5,961,060 | 100.0 | 3,521,221 | 100.0 | 2,513,440 | 100.0 |
| Rock salt | 2,543,679 | 16.7 | 1,413,281 | 13.6 | 62,400 | 1.0 | (2) | (2) | (2) | (2) |
| Solar salt | 910,974 | 6.0 | 1,443,262 | 13.9 | 903,555 | 15.2 | (2) | (2) | (2) | (2) |
| Salt made by the boiling process | 11,733,166 | 77.3 | 7,550,317 | 72.5 | 4,995,105 | 83.8 | (2) | (2) | (2) | (2) |

¹ The report for the Twelfth Census is for the calendar year 1899.

² Not separately reported.

³ Includes table salt, 1,866,058 barrels; common fine, 6,866,126 barrels; common coarse, 2,635,282 barrels; packers', 182,930 barrels; milling, 96,178 barrels; other grades, 80,592 barrels.

The varieties of salt were not reported until 1880. In that year the product of the United States amounted to 29,805,298 bushels of 56 pounds, or 5,961,060 barrels of 280 pounds net. At the census of 1890 it was 52,034,360 bushels, or 10,406,860 barrels, an increase of 74.6 per cent. At the Twelfth Census, which covered the calendar year 1899, it reached 75,989,095 bushels, or 15,187,819 barrels, an increase over 1890 of 45.9 per cent, and over 1880 of 154.8 per cent. The production in 1899 does not include 4,520,796 barrels of salt valued at \$1,171,948, which formed an intermediate product in the manufacture of chemicals in Michigan, New York, and Pennsylvania, and were included in the report for the chemical industry. Including this intermediate product the total output in 1899 amounted to 19,708,615 barrels, valued at \$9,073,784. In addition to the salt product there were obtained, as by-products, 279,437 pounds of bromine, valued at \$64,921, and other products not classified, to the value of \$140.

This table emphasizes the decrease in the manufacture of solar salt as compared with the growth of the salt industry. In 1880 the output was 903,555 barrels, forming 15.2 per cent of all salt produced; while in 1899 the product was 910,974 barrels, forming but 6 per cent of the total production. The production of rock salt, on the other hand, increased from 62,400 barrels in 1880, when it formed but 1 per cent of the total salt production, to 2,543,679 barrels in 1899, forming 16.7 per cent. More than 90 per cent of this rock salt is mined in New York and Kansas. (See Table 6.) Salt made by the boiling process shows a steady increase for each decade. The increase from 1880 to 1899 was 6,738,061 barrels, or 134.9 per cent.

Table 3 presents the statistics of the number of establishments in each state in which salt was made in 1900, together with a statement as to the number and square feet of the covers or ponds in use, and the number of grainers, kettles, open pans, or vacuum pans used in the manufacture by evaporation.

TABLE 3.—COVERS OR PONDS, AND EVAPORATING APPARATUS, BY STATES: 1900.

| STATES AND TERRITORIES | Number of establishments. | COVERS OR PONDS. | | Grainers. | Open pans. | Kettles. | Vacuum pans. |
|-------------------------------|---------------------------|------------------|--------------|-----------|------------|----------|--------------|
| | | Number. | Square feet. | | | | |
| The United States | 159 | 35,222 | 109,921,360 | 522 | 264 | 411 | 40 |
| California | 24 | 474 | 62,062,800 | | 2 | | 1 |
| Kansas | 8 | 30 | 144,656 | 13 | 36 | | |
| Michigan | 53 | 2,009 | 545,300 | 273 | 17 | 5 | 19 |
| Nevada | 3 | 2 | 30,000 | | | | |
| New York | 38 | 32,295 | 8,176,948 | 92 | 43 | 333 | 9 |
| Ohio | 10 | 4 | 12,320 | 83 | 38 | 31 | 5 |
| Oklahoma | 4 | 13 | 92,120 | 2 | 21 | | |
| Texas | 3 | 14 | 135,630 | 24 | 2 | | |
| Utah | 5 | 39 | 38,610,728 | | | 1 | |
| West Virginia | 4 | | | 23 | | 36 | |
| All other states ¹ | 7 | 342 | 110,808 | 12 | 105 | | 6 |

¹ Includes establishments distributed as follows: Illinois, 1; Louisiana, 2; Massachusetts, 2; Pennsylvania, 1; and Virginia, 1.

It appears from Table 3 that the 24 establishments in California used the solar process almost entirely, there being but 2 open pans and 1 vacuum pan in the state, while there were 474 covers or ponds, having an area of 62,062,800 square feet, or 56.5 per cent of the total area in the United States. Utah shows for the solar process 5 establishments, with an area of 38,610,728 square feet for 39 covers or ponds, and for the evaporating process but 1 kettle. The relation of climate to the manufacture of solar salt is clearly seen from the statistics of California and Utah. Because of the dryness of their climate, these states offer exceptional advantages for the development of the solar process, and of the 109,921,360 square feet of covers or ponds in the United States, these 2 states contain 100,673,528 square feet, or 91.6 per cent of the total. Nevada, with 3 establishments, uses the solar process entirely. In New York the ponds for evaporation by solar heat are provided with movable covers; by this means the rains are kept from the brine and the process is considerably accelerated. This state had 38 establishments, and while the solar process still showed an area of 8,176,948 square feet for the 32,295 covers or ponds, the evaporating apparatus consisted of 92 grainers,

43 open pans, 338 kettles, and 9 vacuum pans. The remaining states represent less than 1 per cent of the square feet area in covers or ponds, and practically use the boiling process entirely.

In the last decade manufacturers have made great progress in the production of the finer grades of salt, particularly those for table and dairy use, and for the preservation of fish and meats. Much of the increase shown in production was due to the development of the large meat-packing establishments and, in a lesser degree, to the development of the dairy industry. The extensive use of the chlorination process of extracting gold and silver from ores has required large amounts of the lower grades of salt.

It is interesting to note the extent to which salt of domestic production has supplanted that of foreign manufacture, as seen by the following statement:

| | 1880 | 1890 | 1899 |
|---|-----------|------------|------------|
| | Barrels. | Barrels. | Barrels. |
| In warehouses at the beginning of the year..... | 204,814 | 196,854 | 34,940 |
| Domestic production..... | 5,961,060 | 10,406,860 | 15,187,819 |
| Imports..... | 3,442,753 | 1,807,285 | 1,879,925 |
| Quantity available..... | 9,608,627 | 12,410,999 | 16,602,684 |
| Exports (domestic)..... | 4,436 | 15,292 | 90,001 |
| Exports (foreign)..... | 23,630 | 12,588 | 18,623 |
| In warehouses at the end of year..... | 197,359 | 209,673 | 62,689 |
| Net consumption..... | 9,388,152 | 12,173,446 | 16,431,365 |
| Net imports..... | 3,419,073 | 1,794,697 | 1,361,296 |
| Per cent of net imports to consumption..... | 36.4 | 14.7 | 8.3 |

¹ Calendar year ending December 31.

This statement shows that in 1880 imported salt formed 36.4 per cent of the domestic consumption; in 1890 it had fallen to 14.7 per cent; while in 1899 it was only 8.3 per cent. Reducing to pounds the figures presented above, it is found that the total domestic consumption in 1880 was 2,627,282,560 pounds; in 1890 it was 3,408,564,880 pounds; and 4,600,782,200 pounds in 1899. The population of the United States was 150,189,209 in 1880; ² 62,979,766 in 1890; and ³ 76,149,386 in 1900. From these figures it is seen that the per capita consumption in these three years was, respectively, 52.3, 54.1, and 60.4 pounds.³

Table 4 shows the total quantity of salt produced in each state during the census years of 1890 and 1900, the rank of each state according to the quantity of product, and the percentage that the product of each state is of the total for the United States.

¹ Includes population of Alaska, but exclusive of population of Indian Territory (Oklahoma and Indian Territory in 1890 and 1900) for which there are no figures for 1880.

² Exclusive of population of Hawaii.

³ The figures for the production of salt are for the calendar year 1899, while those for the population are for 1900—no others being available.

TABLE 4.—QUANTITY OF SALT MANUFACTURED IN EACH STATE, AND PER CENT OF TOTAL, 1890 AND 1900.

| STATES AND TERRITORIES. | RANK. | | 1900 | | 1890 | |
|-------------------------|-------|------|---|---------------------------|---|---------------------------|
| | 1900 | 1890 | Number of barrels of salt manufactured. | Per cent of total output. | Number of barrels of salt manufactured. | Per cent of total output. |
| The United States..... | | | 15,187,819 | 100.0 | 10,406,860 | 100.0 |
| Michigan..... | 1 | 1 | 5,206,510 | 34.3 | 3,729,110 | 35.8 |
| New York..... | 2 | 2 | 4,894,852 | 32.2 | 3,225,250 | 31.0 |
| Kansas..... | 3 | 3 | 1,645,350 | 10.8 | 1,140,799 | 11.0 |
| Ohio..... | 4 | 5 | 1,460,516 | 9.6 | 409,514 | 3.9 |
| California..... | 5 | 7 | 640,420 | 4.2 | 255,828 | 2.5 |
| Texas..... | 6 | | 312,486 | 2.1 | (¹) | |
| Utah..... | 7 | 4 | 235,671 | 1.5 | 626,429 | 6.0 |
| West Virginia..... | 8 | 6 | 221,534 | 1.5 | 285,461 | 2.7 |
| Louisiana..... | 9 | | 208,850 | 1.4 | (²) | |
| Virginia..... | 10 | | 151,391 | 1.0 | (²) | |
| Pennsylvania..... | 11 | 8 | 140,000 | 0.9 | 172,400 | 1.7 |
| Illinois..... | 12 | | 56,782 | 0.4 | (²) | |
| Nevada..... | 13 | 9 | 7,671 | 0.1 | 25,250 | 0.2 |
| Oklahoma..... | 14 | | 4,856 | (³) | (²) | |
| Massachusetts..... | 15 | | 980 | (³) | (²) | |
| All other states..... | | | | | 536,319 | 5.2 |

¹ The report of the Twelfth Census is for the calendar year 1899.

² Included with all other states in 1890.

³ Less than one-tenth of 1 per cent.

⁴ Includes Illinois, Kentucky, Louisiana, Massachusetts, Texas, and Virginia, not separately shown in 1890.

SALT PRODUCTION BY STATES.

The first attempt at salt making is recorded in Beverly's History of Virginia, in which it is stated that as early as 1620, "a salt work was set up at Cape Charles on the Eastern Shore." What success attended this effort is not stated.⁴

Prince's Chronological History of New England states that an attempt to manufacture salt was made at Plymouth, Mass., in 1624, but was not successful. Prior to the Revolutionary war, salt was not manufactured in the colonies in large quantities, and it is probable that the supply was procured from England or from other foreign sources. The commencement of hostilities cut off importations, and a system (extensive for that period) of making salt by boiling sea water was developed around New Bedford and on Cape Cod. This industry continued until after the War of 1812, when importation was resumed and the works were allowed to fall into decay. Foreign salt was sold in the American markets at that time for 50 cents per bushel, which was considered a very low figure. It is now sold for from 25 to 30 cents a barrel of 5 bushels, or about one-tenth of the early price.

Salt making from brine other than sea water began in the later years of the Eighteenth century. In the report on manufactures for the Eighth Census, it is stated that salt works were said to have been erected on Big Beaver Creek, in western Pennsylvania, in 1784, but no reference

⁴ United States Agricultural Report, 1858. Historical sketch of salt manufacture, by Wm. C. Dennis.

was made to the success of the enterprise. In New York the first salt made by white men was produced in 1788. At Avery Island, La., in 1791, an unsuccessful attempt was made to make salt from brine. The first salt furnace in what is now West Virginia was built in 1797 on the Kanawha River near the present city of Charleston, and in the following year the first salt was produced in Ohio at what is now known as the Old Scioto Works.

CALIFORNIA.—The first salt made or "harvested" in California appears to have been a purely natural product. Along the shores of Alameda Bay are what were formerly known as "tide lands," covered by the high tides of June and July. Here were a number of natural sinks or ponds where the water was retained and, not being reached by the tides of the late season, was evaporated by solar heat, leaving small quantities of salt. The Spaniards, Mexicans, and Indians gathered this salt annually until about 1852, although the harvest amounted to only a few bushels. In that year the discovery was made that the land was public domain (school lands), and it was purchased from the state at a price said to have been \$1.25 per acre. During the following year levees were built for the more complete retention of the salt water. The harvest for that year, it is said, amounted to 40 or 45 tons, and was sold for \$50 per ton. In the following year other levees were built, and the harvest amounted to about 150 tons which sold for about \$40 per ton. From this time the number of people engaged in the industry increased, but no attempts were made for a number of years to improve the quality of the product, and as the supply increased the prices fell until they reached as low a figure as \$2 per ton.

The first attempt to improve the quality appears to have been made in 1864, when the Crystal Salt Works were built. These works consisted of ponds for receiving and settling the sea water so as to precipitate the gypsum and other impurities which were less soluble than the salt. The mother liquor, or bittern, which remained in the brine after the salt itself was precipitated, was drained off, and a salt of high quality obtained.

The manner of making the settling and evaporating ponds and of preparation for market is thus described by Mr. A. A. Oliver of Mount Eden, Cal.:¹ "The land having been cleared of grass and weeds is first diked with a good levee 3 or 4 feet high. It is then partitioned off into reservoirs of different sizes for receiving and evaporating the water. Crystallizing ponds are excavated and platforms for stacking the salt are built. The ground is principally peat overlaying blue clay; the crystallizing ponds are dug in the peat, of which enough is left to form a bottom or carpet in the pond, the salt crystals being readily removed from the peat floor. There are usually 7 evaporating reservoirs to a plant, the brine being drawn from one to another as it strengthens and decreases in volume by evaporation. The last 3 are called lime ponds, because large quantities of gypsum and other matter, precipitated before the salt, settles in them. The brine is retained

in the seventh reservoir until it reaches a density of 25° Baumé. When this strength of brine is attained, the crystallizing ponds are filled to a depth of 10 or 12 inches and the brine evaporated until 29° by the hydrometer is reached. The mother liquor is then drawn off and the salt gathered up and conveyed into warehouses to drain. This completes the solar process.

"Much of the salt is sold after drying in the warehouses, but many thousands of tons are taken to refining works in San Francisco, where it is more thoroughly dried by artificial heat and ground into various grades for chlorination works, packing houses, and silver mills, and for dairy and table uses. The regular trade winds which blow in the summer months are quite strong in this locality, and greatly aid evaporation."

Owing to overproduction, the industry for a number of years has not been in a prosperous condition. During 1899 the management of all the large works along San Francisco Bay passed into the hands of the Federal Salt Company, and it is believed that with a restricted production and conservative management, the industry may be made a profitable one.

While the principal salt works in California are located on San Francisco Bay, small quantities of salt are produced in other places in the state. There are salt works at Salton, in Riverside county. In a portion of the Colorado Desert which is below the level of the sea, salt water is pumped from wells and evaporated. At National City, in San Diego county, salt is made by the evaporation of water from San Diego Bay. A small amount of rock salt, which is said to be very pure and transparent, has been mined in San Bernardino county 80 miles south of Danby; as many as 5,000 tons have been mined there during one year, but only 250 tons were mined in 1899. The distance from railroads prevents a larger production. A small amount is made from saline springs near Sites, in Colusa county, and at Black Lake, in San Luis Obispo county.

The report on manufactures for the Eighth Census contains the first official record of the salt production of California, which was then reported as 44,000 bushels, or 8,000 barrels. The production reported at each subsequent census has been: in 1870, 34,971 barrels; in 1880, 176,949 barrels; in 1890, 255,328 barrels; and in 1899, 640,420 barrels.

ILLINOIS.—There was 1 establishment producing salt in Illinois in 1899, as in 1890. The works are located at St. John, Perry county, and as this establishment is the only one in the state, the statistics are combined with those for other states having less than 3 establishments.

KANSAS.—The first salt made in Kansas was obtained from marshes which are scattered over the central part of the state. The pioneer travelers, hunters, and traders were led by buffalo paths to these marshes, which are the salty remains of decomposed saline strata; they are large, shallow lakes which dry up almost entirely in the summer, leaving a thin white scale of salt deposited over a large area of grassless territory. Along the banks of these

¹ Eighteenth Annual Report of the United States Geological Survey, 1896-97, Part 5, page 1310.

marshes salt works were constructed, similar to those described as used by the ancients. Stone arches were erected about the kettles in which the brine was evaporated, and chimneys were built in order to economize fuel and heat as much as possible. Until 1868 these crude factories were the only ones in Kansas. As late as 1870, salt obtained in this way was worth as much as 10 cents a pound,¹ equivalent to \$28 per barrel.

In 1867 a company erected a plant and began drying brine at Solomon City, where wells were sunk and good brine struck at about 75 feet. A second solar plant was erected by William Dewar at Solomon City in 1874. No record of any salt manufactured in Kansas was obtained until the Tenth Census, in 1880, in which year a total production of 2,000 barrels was reported. The development of the industry between 1880 and 1890 was marked by one of the most remarkable changes which took place in that region during the decade. The product of Kansas in 1890, as reported by the Eleventh Census, was 1,140,799 barrels, while in 1899 it reached a total of 1,645,350 barrels. It was not until the latter part of the decade from 1880 to 1890, however, that salt manufacture in Kansas assumed importance as an industry. In 1887 the state experienced a period of great activity in the development of coal mining and other industries. In the search for petroleum or gas a large body of rock salt was struck near Hutchinson. The people who owned the wells in which the salt was found were much disappointed at finding neither coal oil nor gas in large quantities, and did not at once appreciate the real value of the discovery, but an important industry was soon built up, as is shown by the statistics above presented, and some of this salt, particularly the dairy and table brands, now finds its way into the markets of the Eastern states.

A small amount of salt was made by solar evaporation in Kansas in 1899, but the greater portion of the product was evaporated in the 13 grainers and 36 open pans shown in Table 3. The use of kettles has been abandoned, and no vacuum pans have been introduced into the state. The amount of rock salt produced in Kansas was not reported separately at the Eleventh Census. The quantity produced in 1899 amounted to 468,029 barrels.

A body of rock salt was discovered at Lyons, in Rice county, in 1887, by prospectors in search of oil or natural gas.² The drill penetrated the body of salt at a depth of 830 feet, and passed through it only on reaching a depth of 1,100 feet. In 1890 a company was organized by business men at Lyons, Kans., and St. Louis, Mo., and a shaft was sunk at a point about three-fourths of a mile from the city of Lyons. The shaft penetrated the bed of salt to a depth of 265 feet, making the total depth of the shaft from the surface, 1,065 feet, there being some 30 or 40 feet of salt below the bottom of the shaft.

¹ Eleventh Annual Report of the Kansas Bureau of Labor, 1895, quoted in the Eighteenth Annual Report of the United States Geological Survey, 1896-97, Part 5, page 1306 et seq.

² Report of the Kansas Bureau of Labor, 1893.

On sinking the shaft through this 265 feet of salt strata, 15 workable veins of rock salt, ranging from 4 to 18 feet in thickness, and separated by veins or layers of shale, from one-fourth of an inch to 5 feet in thickness were penetrated. A vein of salt 18 feet in thickness and of exceptional purity was selected for mining purposes, the lower 10 or 12 feet of this vein being mined. From the bottom of the shaft the mine is laid off somewhat similarly to the streets of a city, the main streets, 25 feet in width, running east and west, and the cross streets, of the same width, running north and south. From these cross streets rooms or chambers are driven, having a width of 50 feet, there being pillars 50 feet in thickness left standing between the chambers. It is in these chambers that the principal mining operations are carried on.

The rock salt is at first undercut with mining or channeling machines operated by compressed air; holes are made in the salt with air drills; and dynamite, exploded by electricity, brings the salt down to the floor of the mine. The loose salt is loaded on cars, each holding about 2 tons, conveyed to the shaft by underground railroads, and hoisted to the top of a five-story mill building directly over the mouth of the shaft. It is dumped automatically from the mine cars into crushers over dumps and passes by gravity down through different sized crushers to the screen room below, where, by screens of various sizes, it is separated into 9 different grades. Thence it is conveyed to large bins, from which it is loaded into railway cars.

LOUISIANA.—The southern coast of Louisiana is marked by a striking topographical and geographical feature, consisting of 5 islands or mounds which rise from the otherwise marshy land. These islands range in height from a few feet to about 250 feet. They are arranged in a practically straight line running northwest and southeast. They are known as Jefferson or Orange Island, Weeks Island, Avery Island, Cote Blanche, and Belle Isle. All of these, except Cote Blanche, have been prospected for salt, which has been struck at a comparatively shallow depth in each case. No knowledge of the depth of the beds, however, has yet been obtained. On Jefferson Island a drill penetrated to a depth of 2,100 feet without passing through the salt bed.

So far as known the first attempt to manufacture salt in Louisiana was made in 1791,³ on Avery Island, the discovery being made by a man named John Hays, who came across a brine spring while hunting. The attempt to manufacture salt from this spring was, however, not a success, as the supply of brine was not sufficient to pay the expenses of operation. During the War of 1812 the price of salt was so advanced that operations were resumed, and continued there until 1815, when the work was stopped. It was not again resumed until 1861, when, on account of the blockade of the southern seaports, salt became expensive. As the supply of brine was not sufficient to meet the

³ Eighteenth Annual Report of the United States Geological Survey, 1896-97, Part 5, page 1296 et seq.

requirements, an attempt was made to deepen the wells, and in May, 1862, a body of rock salt was encountered at a depth of about 16 feet. The mining of rock salt in pits was then introduced, and about ten pits were dug, the salt being found at from 14 to 20 feet below the surface. No official record of the salt taken from these works was kept, although it is said that there were from 400 to 600 men employed, and that 22,000,000 pounds were mined during the 11 months they were in operation.

The Report of the American Bureau of Mines, published in 1867, stated that this method of pit mining would possibly endanger subsequent successful shaft mining. This prediction was borne out, as the shaft afterwards sunk to the salt body had to be abandoned because of surface waters penetrating to the works. The first shaft sunk on Avery Island was a small one, 8 by 8 feet and 83 feet deep. This shaft was leased afterwards to the American Salt Company, which continued it to a depth of 190 feet and extended galleries east and west to distances of 270 and 370 feet respectively, crosscuts being made from these galleries.

The problem of marketing the product of the mines proved to be so serious that the mining company cut a channel through two miles of marsh to deep water, and considerable trade was thus developed with Galveston, New Orleans, and Mobile. Transportation was further improved in 1886 by the construction of a branch railroad from New Iberia. The later owners of the mines experienced much difficulty in keeping back surface water from the mine works, and were finally compelled to abandon the shaft. In 1897 a shaft was sunk some distance from the old one, and the new works were equipped with all modern appliances. The new shaft was sunk 500 feet before any attempt at working the property was begun. It was evidently believed that by sinking the shaft to this distance, all danger from surface waters would be obviated.

Until 1898 all the production of Louisiana had been from mines at Avery Island. In 1898 the Gulf Company of Morgan City sunk a shaft on Belle Isle, but, through a misapprehension as to the conditions, the galleries were driven out from the shaft at too shallow a depth, and the surface waters percolating through the thin stratum of soil and the roof of salt, forced an abandonment of the work. A new shaft was then sunk at a distance of about a quarter of a mile from the first. An evaporating plant was erected beside the original works and a considerable quantity of brine salt was made there in 1899, the grainer process being used.

The entire production of Louisiana in 1899 was 208,850 barrels. In 1890 Louisiana was included with "all other states." In 1880 the production was reported as 62,400 barrels, and in 1870 as 25,600 barrels. No production was reported at the census of 1860.

MASSACHUSETTS.—Many years ago a considerable amount of salt was made in Massachusetts from sea water, but this industry has almost entirely disappeared. The total amount made in Massachusetts in 1899 was 980 barrels. There was only 1 establishment engaged in the manufac-

ture at the Eleventh Census, and the state was not reported separately. In 1880 the production amounted to 1,915 barrels, not quite double the production in 1899. In 1870 it amounted to 4,569 barrels, and in 1860 to 6,305 barrels.

MICHIGAN.—Michigan was for a number of years the leading state of the Union in the manufacture of salt. Its salt springs were used by the Indians, but salt manufacture is of comparatively recent date. On March 4, 1838, the governor of the state approved an act directing the state geologist to bore for salt at one or more of the salt springs. An appropriation of \$3,000 was made for the purpose, and the state geologist was directed to report the result of his investigation to the next session of the legislature. The report was made January 1, 1839, and states: "The brine springs of our state, like those of Ohio, Pennsylvania; and Virginia [now West Virginia], emanate from a rock which lies deep, being covered with a mass of rock and earthy matter which it is necessary to penetrate. In this respect they differ most essentially from those of New York." Other work was done by the state in 1840, 1841, and 1842, but no satisfactory results were obtained.

It remained for private enterprise to establish the industry in the Saginaw Valley. The first well was bored in 1859, at what is now East Saginaw.

The census report covering the fiscal year ending May 31, 1860, gives the production for the state as 472 barrels. This was the beginning of an important industry, but irregularities in manufacture soon developed the necessity of a state salt inspection and a law was enacted in 1869, establishing the office of State Salt Inspector. By this time the industry had developed so that the production amounted to over 550,000 barrels.

The census report for 1870 shows that the production in Michigan amounted to 796,263 barrels; in 1880 it was 2,485,177 barrels; in 1890 it was 3,729,111 barrels; and in 1899 it was 5,206,510 barrels.

NEVADA.—There were 3 establishments in the state of Nevada engaged in this industry in 1899. No production was reported for this state at any previous census. The salt is made from brine springs, a portion of it being used locally for domestic purposes, or for the reduction of silver in works using the chlorination process. The entire production was obtained by solar evaporation.

NEW YORK.—Lemoyne, a French Jesuit explorer, in his journal, published in 1653, mentioned the salt springs of western New York, which were at that time well known to the Indians. In 1770¹ salt from the Onondaga region was in use among the Delaware Indians, and was sold by them in Albany and as far north as Quebec to the pioneer whites. The first salt made by white men in this district was in 1788.

New York was the first state to pass any law regulating the manufacture of salt. This was done as early as 1797, and

¹ Eighteenth Annual Report of the United States Geological Survey, Part 5, 1896-97, page 1200 et seq.

for over one hundred years the state maintained control of the Onondaga salt reservation, furnishing the brine to those who paid for it. The state built and repaired the settling tanks from which the brine was delivered to the lessees. The law regulating the manufacture of brine on the Onondaga reservation was amended a number of times after enactment. At first, 4 cents per bushel was charged on all salt made, and each lessee was required to manufacture not less than 10 bushels a year and prohibited from charging more than 60 cents per bushel. In 1805 the rate was reduced to 3 cents per bushel; in 1812 it was advanced to 12½ cents, in order to raise revenue for the construction

of the canals of the state. The duty was reduced to 6 cents in 1834 and to 1 cent in 1846, which rate was continued until the state sold its title to the lands, in 1898, a little over one hundred years after assuming control.

The sale of the state's interest in the Onondaga reservation was due to the fact that the revenue obtained from the sale of the brine was less than the expense of keeping up the works.

Table 5 presents a statement of the amount of salt produced during the one hundred years from 1797, when the works were first put in operation.

TABLE 5.—SALT PRODUCTION OF THE ONONDAGA DISTRICT, NEW YORK, FOR 100 YEARS.

| YEARS. | Total. | Solar. | Fine. | YEARS. | Total. | Solar. | Fine. |
|--------|-----------------|-----------------|-----------------|--------|-----------------|-----------------|-----------------|
| | <i>Bushels.</i> | <i>Bushels.</i> | <i>Bushels.</i> | | <i>Bushels.</i> | <i>Bushels.</i> | <i>Bushels.</i> |
| 1797 | 25,474 | | 25,474 | 1847 | 3,951,855 | 262,879 | 3,688,976 |
| 1798 | 59,928 | | 59,928 | 1848 | 4,737,126 | 342,497 | 4,394,629 |
| 1799 | 42,704 | | 42,704 | 1849 | 5,083,569 | 377,785 | 4,705,884 |
| 1800 | 50,000 | | 50,000 | 1850 | 4,268,919 | 374,732 | 3,894,187 |
| 1801 | 62,000 | | 62,000 | 1851 | 4,614,117 | 378,967 | 4,235,150 |
| 1802 | 75,000 | | 75,000 | 1852 | 4,922,533 | 633,595 | 4,288,938 |
| 1803 | 90,000 | | 90,000 | 1853 | 5,404,524 | 577,947 | 4,826,577 |
| 1804 | 100,000 | | 100,000 | 1854 | 5,803,347 | 734,474 | 5,068,873 |
| 1805 | 154,071 | | 154,071 | 1855 | 6,082,885 | 498,124 | 5,584,761 |
| 1806 | 122,577 | | 122,577 | 1856 | 5,966,810 | 709,391 | 5,257,419 |
| 1807 | 175,448 | | 175,448 | 1857 | 4,312,126 | 481,280 | 3,830,846 |
| 1808 | 319,618 | | 319,618 | 1858 | 7,033,219 | 1,514,554 | 5,518,665 |
| 1809 | 128,282 | | 128,282 | 1859 | 6,894,272 | 1,345,022 | 5,549,250 |
| 1810 | 450,000 | | 450,000 | 1860 | 5,593,247 | 1,462,565 | 4,130,682 |
| 1811 | 200,000 | | 200,000 | 1861 | 7,200,391 | 1,884,697 | 5,315,694 |
| 1812 | 221,011 | | 221,011 | 1862 | 9,053,874 | 1,983,022 | 7,070,852 |
| 1813 | 226,000 | | 226,000 | 1863 | 7,942,383 | 1,437,656 | 6,504,727 |
| 1814 | 295,000 | | 295,000 | 1864 | 7,378,834 | 1,971,122 | 5,407,712 |
| 1815 | 322,058 | | 322,058 | 1865 | 6,385,930 | 1,886,760 | 4,499,170 |
| 1816 | 348,665 | | 348,665 | 1866 | 7,158,503 | 1,978,183 | 5,180,320 |
| 1817 | 408,665 | | 408,665 | 1867 | 7,595,565 | 2,271,892 | 5,323,673 |
| 1818 | 406,540 | | 406,540 | 1868 | 8,666,616 | 2,027,490 | 6,639,126 |
| 1819 | 548,374 | | 548,374 | 1869 | 8,662,237 | 1,857,942 | 6,804,295 |
| 1820 | 458,329 | | 458,329 | 1870 | 8,748,113 | 2,487,691 | 6,260,422 |
| 1821 | 526,049 | | 526,049 | 1871 | 8,374,956 | 2,464,454 | 5,910,492 |
| 1822 | 481,562 | | 481,562 | 1872 | 7,930,925 | 1,882,604 | 6,048,321 |
| 1823 | 726,988 | | 726,988 | 1873 | 7,460,357 | 1,691,359 | 5,768,998 |
| 1824 | 816,634 | | 816,634 | 1874 | 6,029,300 | 1,667,368 | 4,361,932 |
| 1825 | 767,203 | | 767,203 | 1875 | 7,179,446 | 2,655,955 | 4,522,491 |
| 1826 | 811,023 | | 811,023 | 1876 | 5,892,677 | 2,308,679 | 3,583,998 |
| 1827 | 983,410 | | 983,410 | 1877 | 6,427,933 | 2,525,335 | 3,902,648 |
| 1828 | 1,160,888 | | 1,160,888 | 1878 | 7,176,197 | 2,788,754 | 4,387,443 |
| 1829 | 1,129,280 | | 1,129,280 | 1879 | 8,322,162 | 2,957,744 | 5,364,418 |
| 1830 | 1,435,446 | | 1,435,446 | 1880 | 7,998,750 | 2,516,485 | 5,482,265 |
| 1831 | 1,514,037 | | 1,514,037 | 1881 | 7,917,236 | 3,011,461 | 4,905,775 |
| 1832 | 1,652,985 | | 1,652,985 | 1882 | 8,340,180 | 3,032,447 | 5,307,733 |
| 1833 | 1,835,646 | | 1,835,646 | 1883 | 7,497,431 | 2,444,374 | 5,053,057 |
| 1834 | 1,948,252 | | 1,948,252 | 1884 | 6,942,270 | 2,363,860 | 4,578,410 |
| 1835 | 1,209,867 | | 1,209,867 | 1885 | 6,934,299 | 2,439,332 | 4,494,967 |
| 1836 | 1,912,858 | | 1,912,858 | 1886 | 6,101,757 | 2,772,348 | 3,329,409 |
| 1837 | 2,167,287 | | 2,167,287 | 1887 | 5,695,797 | 3,118,974 | 2,576,823 |
| 1838 | 2,575,033 | | 2,575,033 | 1888 | 5,057,367 | 3,115,314 | 2,542,053 |
| 1839 | 2,864,718 | | 2,864,718 | 1889 | 5,365,039 | 2,916,922 | 2,448,117 |
| 1840 | 2,622,305 | | 2,622,305 | 1890 | 4,928,122 | 2,726,471 | 2,201,651 |
| 1841 | 3,340,767 | 220,247 | 3,120,520 | 1891 | 3,948,913 | 2,113,727 | 1,735,186 |
| 1842 | 2,291,963 | 163,021 | 3,128,882 | 1892 | 4,405,674 | 3,122,789 | 1,282,885 |
| 1843 | 3,127,500 | 318,105 | 2,809,395 | 1893 | 3,065,906 | 2,332,052 | 733,854 |
| 1844 | 4,063,552 | 332,418 | 3,671,134 | 1894 | 3,227,253 | 2,355,394 | 871,859 |
| 1845 | 3,762,338 | 353,455 | 3,408,903 | 1895 | 3,214,124 | 2,608,289 | 605,835 |
| 1846 | 3,885,851 | 381,705 | 3,507,146 | 1896 | 2,806,600 | 2,464,422 | 342,178 |

During the first forty-four years only boiled salt was manufactured on the Onondaga reservation, and in this period the production increased from 25,474 bushels in 1797 to 2,622,305 bushels in 1840. The manufacture by the solar process began with the production of 220,247 bushels in 1841. In the same year the amount of fine salt

made was 3,120,520 bushels, making a total product of 3,340,767 bushels. The salt-making industry on the Onondaga reservation continued to increase gradually until 1862, in which year 1,983,022 bushels of solar salt and 7,070,852 bushels of fine or boiled salt were produced, making a total product of 9,053,874 bushels. This was

the largest product ever obtained. Since that time the production has shown a declining tendency, which from 1885 to 1896 was quite pronounced, the total output in the latter year amounting to only 2,806,600 bushels. Practically all this decrease has been in the manufacture of fine salt, which in 1896 had declined to 342,178 bushels, or only 4.8 per cent of what it was in 1862. This rapid decline, which is particularly noticeable from 1882 to 1896, was due in a large degree to the development of the Warsaw district, which began producing in 1883. The manufacturers in the Warsaw district were independent of state control, and their product was not subjected to the tax of 1 cent per bushel which was imposed upon the production of the reservation. The average price ranged between 25 and 30 cents per barrel containing 5 bushels. The tax, therefore, amounted to practically 20 per cent of the selling price.

The discovery of salt in the Warsaw district, which is in the county of Wyoming, was made near the town of Wyoming in 1880 by parties drilling for oil. The oil was not found, and very little salt was made from this well. In the fall of 1882 a well was sunk to the salt bed and the manufacture began the following year. Sixteen other companies were afterwards formed. The initial production, in 1883, amounted to 600,000 bushels, or 120,000 barrels. In 1890 the production had increased to 7,732,060 bushels, or 1,546,412 barrels. The production in this district in 1899 is not separately published.

The opening of the Genesee district was nearly contemporaneously with that of the Warsaw district, the first well being put down in the spring of 1883, and the manufacture beginning the same year. The initial output was 80,000 barrels of common fine salt. Of the 3 companies which began operations in 1884 and the 3 which began in 1885 only 1 survives.

The Ithaca or southern New York district was developed in 1895. The production from this region has not been particularly important.

The mining of rock salt in New York began in December, 1885. The first shaft of the Retsof Mining Company was located near York, Livingston county. In 1892 shafts were sunk near Leroy, Genesee county, and at Livonia and Greigsville, Livingston county, and shipments of salt were made from these mines that same year. The shaft of the Retsof mine is 1,100 feet in depth; the Lehigh shaft, near Leroy, 804 feet; the Livonia shaft, 1,432 feet; and the Greigsville shaft, 1,150 feet. Three of these companies have since passed out of existence, and all the rock-salt mining in the state of New York is now carried on by one company.

The production of rock salt in New York state varies from 150,000 long tons to 250,000 long tons annually, according to the market requirements.

OHIO.—The first attempt at salt making in Ohio was made in 1798 at what is now called the Old Scioto Salt Works, located on Salt Creek, a branch of the Scioto River in Jackson county. At this time the wells were dug only

to the rocks below the surface soil, the brine flowing through the rock crevices into the wells. The brine was weak, full of bittern, and no attempt was made to purify the product even by draining. The brine was evaporated in kettles, from which it was transferred directly to pack horses and transported to other settlements, where it was sold for \$3 and \$4 per bushel. This continued as late as 1808. The brine springs were thought to be so important to the country, that when the territory of Ohio was admitted as a state, in 1802, a tract 6 miles square, embracing the wells, was set apart for the use of the state. Two other reservations were made, each of 640 acres or 1 square mile, 1 being in Muskingum county and the other in Delaware county.

The state legislature in 1804 enacted a law regulating the management of the salt reservations, and an agent or superintendent was appointed to lease lots to manufacturers, to inspect the salt made, and to carry out the other provisions of the law. A tax of 16 cents per year was imposed on each gallon of kettle capacity of the plant, no one being allowed to have less than 600 nor more than 4,000 gallons to a furnace. The revenue to the state, however, did not exceed \$500 in any one year, and as better discoveries were made on navigable streams, the old works became unprofitable, were abandoned and the reservations sold. The exact date of the development of the other salt-producing properties in Ohio is not known, but it was probably about 1825.

There is no record as to the quantity made in Ohio prior to 1860, in which year, according to the census, the product amounted to 348,640 barrels. In 1870 the product of Ohio amounted to 579,730 barrels. In 1880 it had decreased to 530,060 barrels. Between 1890 and 1899 the production increased rapidly, and amounted in the latter year to 1,460,516 barrels. From Table 3 it appears that there were in operation during 1899, 83 grainers, 38 open pans, 31 kettles, and 5 vacuum pans. There were also 4 covers or ponds, having an area of 12,320 square feet, in which solar salt was made. The principal grades produced in the state are table, dairy, and common fine.

OKLAHOMA.—Salt making began in Oklahoma as late as 1896. The works were established near the town of Okeene, on the banks of a branch of the Cimarron River, a creek whose waters are highly impregnated with salt. One of the first attempts at salt making was made by Mr. J. M. White, who began evaporating the brine in an old stove kettle, afterwards using a galvanized wash tub. These were soon destroyed by the action of the salt, and he then experimented with an ordinary sorghum pan, meeting with more success. Others adopted the same method, and there are now 4 establishments engaged in the manufacture, although the original primitive plants are still used. There is comparatively little market for the salt, the demand being limited to a local consumption. The amount made in the territory in 1899 was 4,856 barrels, valued at \$4,329.

PENNSYLVANIA.—The manufacture of salt in the state

of Pennsylvania has ceased to be an industry of any moment, although at one time it was of comparative importance in the western part of the state. The industry has been mainly confined to the valley of the Conemaugh River, where it was quite firmly established early in the present century.

In the census report for 1860 it is stated that a company of Philadelphia and Pittsburg merchants erected salt works on Big Beaver Creek in 1784. In 1810 one establishment in Indiana county was reported as having made 600 bushels of salt, worth \$1,000. About that time William Johnson commenced boring on the Conemaugh River, near the mouth of the Loyalhanna, struck an abundant fountain of salt water at the depth of 450 feet, and erected furnaces, pans, etc., by which he made about 30 bushels a day, and sold at a high price. Other wells were soon sunk to a depth of 300 to 600 feet in the coal measures of that region, and the price of salt was reduced as low as \$1 per barrel, but afterwards fixed at \$2, which afforded a profit. The pumps were first worked by horse power and afterwards by small engines. In 1820 the business employed a capital of \$38,000 in western Pennsylvania, and in 1826 there were 35 salt works on the Conemaugh and Kiskiminitas rivers, 3 on the Allegheny, and others were being constructed elsewhere, one of which was expected to yield 1,500 bushels daily. Salt was supplied at the works for from 20 to 25 cents per bushel, while it brought 50 cents in Kentucky, Ohio, and Illinois.

In Egle's History of Pennsylvania it is stated that about 1812 or 1813 the discovery of a salt spring was made by an old lady named Deemer at low-water mark of the Conemaugh River, about 2 miles above the present site of Saltsburg. This discovery shortly led to the development of an important industry in Indiana county. A well was sunk to the depth of 270 feet and an abundance of salt water found. The salt was manufactured by boiling the water in large kettles, using wood for fuel, and was sold at \$5 per bushel. Afterwards, as the number of wells and plants increased, the price was reduced to \$4 per bushel. Improvements were made in the methods of pumping the brine and manufacturing the salt; coal was used instead of wood for fuel, and steam engines instead of horse power for boring and pumping. The place was known as the Great Conemaugh Salt Works. The same authority states that between 1820 and 1830, 21 salt works, with a total of 24 wells, were in operation on the Conemaugh River, in Westmoreland county. Mr. James M. Swank, in his report to the Centennial Commission, states that all but 3 of these works had been abandoned in 1876. Mr. Swank states that as early as 1811 salt works, which are reported to have produced considerable salt, were erected on the Sinnemahoning Creek, probably in what is now the county of Cameron.

The census report of 1820 makes a brief reference to salt manufacture in Pennsylvania in that year, but in most instances shows values only, without quantities. Armstrong county had 38 pans in operation, and the value of

the product amounted to \$18,000. Erie county had 18 kettles of 32 gallons each in operation. Indiana county had 32 pans and 190 kettles, the price being given as \$1 per bushel. Westmoreland county had 6 establishments, and produced 70,000 bushels worth \$1 per bushel.

The manufacture of salt was the only industry reported in Indiana county in 1820. The Gazetteer of Pennsylvania, published in 1832, shows that the total product of Pennsylvania in 1830 was 100,000 barrels of 5 bushels each, valued at \$200,000. In 1840 it is reported to have been 549,478 bushels, an increase of about 10 per cent in the ten years. In 1850 there were 47 establishments, and the production amounted to 919,100 bushels, valued at \$206,796.¹ In 1860 the number of establishments had decreased to 34, but the product had increased to 1,011,800 bushels, with a decrease in value to \$196,916. A considerable decrease in the industry was shown in 1870, when there were 27 establishments, producing 579,970 bushels, valued at \$187,312. In 1880 the number of establishments had been reduced to 16, but the product had increased to 851,450 bushels, with a decrease in value to \$177,415. In 1890 there were only 3 of these establishments in Pennsylvania, but the product was a little more than that of ten years before, amounting to 862,000 bushels valued at \$156,398. In 1899, there was only 1 establishment in Pennsylvania, and the statistics were included under "all other states."

TEXAS.—The first salt well sunk in the state was begun at the town of Colorado in 1884. Salt was struck at a depth of 7 feet and the work of making from brine was begun in 1885. A second well was drilled in 1889 and completed before the close of the year. The manufacture of salt was begun at once and since that time the industry has assumed considerable importance. As there were only 2 establishments, the production of the state was not reported separately at the census of 1890.

In 1899 the product amounted to 312,436 barrels, valued at \$256,900, a third establishment having been added during the decade. Of this product 10,000 barrels were made by solar evaporation and the rest by boiling, either in grainers or open pans. The greater part was made in grainers, of which there were 24 in use in the state. There were only 2 open pans operated.

UTAH.—The manufacture of salt in the territory of Utah began almost immediately after the advent of the Mormons in 1847. The first salt was harvested from the shores of Great Salt Lake in the following year. The water from the lake being thrown back upon the shore by westerly winds prevailing in the spring, formed small pools of brine which evaporated during the warm, dry weather of July and August, leaving deposits of salt. This was scraped up and used for domestic purposes and for the curing of meats. The early settlers were supplied in this way until about 1860, when the idea was con-

¹ So given in Vol. III, Report of Ninth Census, page 622. In the Digest of the Census of 1850, page 100, the value is given as \$161,796, without the quantity of salt.

ceived of making dams in low places which would hold large quantities of water. Salt was made in this way in 1860, but no product is reported by the census of that year. The dams were flooded in the spring, and the salt deposited during the summer by solar evaporation. As the summer is generally dry it is not necessary to cover the ponds, and the process of evaporation is practically a continuous one. At about this time the chlorination process for the reduction of silver from its ores was discovered, and the first use of salt from Great Salt Lake for this purpose is reported to have been made at the Alice mine in Butte, Mont. This was before the days of railroads, and the product was carried on the backs of mules from the lake to the mine at a cost of about \$200 per ton.

It does not appear from the census records that this very largely increased the production from the lake, as the amount reported in 1870 was only 1,950 bushels. By 1880, however, the output had increased to 483,800 bushels, and a number of large companies had in the meanwhile been formed. By 1890 this output was still further augmented to a production of 3,132,143 bushels, valued at \$144,300.

In 1899 Utah produced 235,671 barrels, equivalent to 1,178,355 bushels, nearly all of which was made by solar evaporation. In the making of salt by solar evaporation the pumps are started each year about the month of March, the brine being pumped into large reservoirs, each covering from 10 to 20 acres. As the brine becomes stronger it is drawn off into other reservoirs or sloughs covering from 3 to 15 acres. Sloughs are made with a hard clay bottom and with a levee thrown up 3 or 4 feet high around the sides to retain the brine and at the same time furnish a ditch on the outside to carry off fresh water. The sloughs are replenished from time to time during the summer, the reservoirs being kept stocked until September or October, by which time salt is deposited to the depth of from 3 to 6 inches. Harvesting then begins with wheelbarrows and tramway, the salt being stacked on the banks in large piles shaped something like a haystack, but not so high. A crust which answers every purpose of a shingle roof forms on each pile. This is the crude salt ready for market; it is hauled to the mills for refining purposes or is shipped in this crude state to the silver mills working under the chlorination process.

The latest improved machinery in the mills consists of revolving cylinders, roller burrs, and a series of sieves. The salt is hauled to a crusher, whence it is carried by hoppers to the heated cylinders, which deliver it perfectly dried to the roller burrs; thence it goes to the sieves. It is purified by means of a suction blower as it passes over the sieves. The impurities are lighter than the salt, and as it passes over the sieves the suction is set with just enough strength to take off the impurities and allow the salt to pass on to the bins, the different grades being conveyed to the proper bins by a series of hoppers.

VIRGINIA.—Since West Virginia was separated from Virginia, there has been only 1 establishment making salt

in the latter state. This is located at Saltville, in the valley of the Shenandoah River. The production is combined with that of other states having less than 3 establishments engaged in the business.

Most of the Virginia product is used in the production of soda ash, bicarbonate of soda, etc., by an electrolytic process.

WEST VIRGINIA.—The early attempts at making salt in West Virginia were attended with many interesting incidents. They have been historically recorded in a contribution to a report on the resources of West Virginia by Dr. J. P. Hale, of Charleston, which was published in 1876 by the state board of centennial managers. According to this the principal points at which salt has been manufactured in the state are: Charleston, on the Kanawha River; Hartford, Mason City, Clifton, and other places in Mason county, along the Ohio River; near Birch on Elk River; and at a few other places on a small scale for local use. The seat of the industry at present is along the Ohio River in Mason county, there being but one establishment of any importance in the state outside of that county.

The earliest attempts were on the Kanawha River. The Kanawha "licks" were known to have been used by the Indians, and were the gathering places for buffalo, elk, deer, and other wild animals before the advent of the white man. The earliest settlement in this region was made in 1774 by Walter Kelly and family at the mouth of the creek bearing his name. They were all killed by Indians. Later, in 1785, when life in that section had become a little more secure, Joseph Ruffner, an enterprising farmer from the Shenandoah Valley of Virginia, purchased about 500 acres of land at the mouth of Campbell's Creek from one John Dickinson, on Dickinson's representations as to the valuable salt springs on the property. Ruffner also purchased 900 acres, extending from a point on the Elk River to the Kanawha, and embracing the present site of Charleston. Joseph Ruffner did not live to see his design for making salt effected, but in transmitting the property to his sons David and Joseph, he enjoined them to carry out his plans for building extensive salt works. All that the elder Ruffner had accomplished was the leasing of the "licks" to one Elisha Brooks, with the right to manufacture salt. Brooks, in 1797, erected the first salt furnace in Kanawha county, which was also the first one west of the Allegheny Mountains. It consisted of two dozen small kettles set in a double row, with a flue beneath, a chimney at one end and a fire bed at the other.

In order to obtain a supply of brine, Brooks sank two or three "gums" into the mire and quicksand of the lick and dipped up the brine with a bucket and sweep. In this crude way he manufactured about 150 pounds of salt a day, which he sold at from 8 to 10 cents a pound. No attempt was made to purify the salt from the bittern and other impurities, either organic or inorganic. This salt soon acquired a reputation for its strong, pungent taste and superior qualities for curing meat, etc. The presence

of iron gave the salt a reddish tinge, and it became widely and favorably known as "that strong red salt from the Kanawha 'licks'."

In 1806 the two brothers Ruffner, inspired by the growing needs of an increasing population, began to look for the source of the brine springs in the hope of finding a larger and better supply. The history of their struggle, as recorded by Dr. Hale, is very interesting. They began by sinking a "gum," consisting of a hollow sycamore tree, which reached what they supposed was bed rock at 13 feet. With the primitive means at their command, even this little was accomplished only after much work and many and trying delays. Upon cutting at the bottom with crowbars, this bed was found to be shale only about 6 inches thick, which, when penetrated, furnished a larger stream of brine but much weaker than the "lick" at the surface. The brothers, disappointed at this result, decided to sink a well in the bottom land about 100 yards from the river, but after penetrating 45 feet of alluvial deposit they struck the same shale as at the "gum" with only a slightly brackish water.

They then decided to return to the "gum" and continue work until they struck bed rock, which they finally did at about 17 feet. The quantity of brine was small but of a strong quality. Encouraged by this, they decided to drill the rock. This was done by means of a long drill with a 2½-inch chisel bit attached at the upper end to a spring pole, and the pole to a rope. Boring by this means was slow, difficult, and tedious, but on November 1, 1807, at 17 feet in the rock, they struck a larger flow of strong brine. Continuing the work, at 28 feet a still larger and stronger flow was obtained. On January 15, 1808, at 40 feet in the rock, they found a stream large and strong enough for all their purposes and ceased boring.

But they had no pipes in which to bring the strong brine to the top of the ground undiluted by the surface seepage. These were finally provided by whittling out two half-tubes from long strips of wood, fitting the edges carefully together, and wrapping the whole from end to end with small twine. The brine came up free and strong from below, the "gum" floor was made water-tight, and from the "gum" the brine was raised to the surface by bucket and sweep. This is said to be the first rock-bored salt well west of the Allegheny Mountains, if not in the United States; it required a year and a half to complete it. The success is the surprising feature. As Dr. Hale says: "Without preliminary study, previous experience, or training; without precedents in what they undertook; in a newly settled country, without steam power, machine shops, skilled mechanics, suitable tools or materials, failure rather than success might reasonably have been predicted."

Meanwhile their furnace, a reproduction of Brooks' on a larger plan, was under construction and was completed in time for the brine. On February 8, 1808, the Ruffner brothers secured their first output, and immediately cut the former price of salt one-half, selling it at the unprecedentedly low figure of 4 cents per pound. The neigh-

bors, who had watched the progress and result of the Ruffner struggle, began boring on their own lands with more or less success, and in 1817 there were about 30 furnaces and 15 or 20 wells in operation. Improvements in mechanical methods of raising the brine were adopted, the bucket and sweep giving way to the winch, and the winch in 1828 to steam. Coal, too, began to be used for fuel, David Ruffner being the enterprising pioneer in this as in the boring. In 1831 William Morris invented an ingenious but simple tool for boring salt wells, which is to-day used in boring oil and gas wells. It was the tool known as "slip" or "jar." Morris's invention was never patented, and, like the hydraulic ram, has not been improved upon.

In 1835 there were about 40 furnaces along the Kanawha River, producing annually about 2,000,000 bushels of salt. But the activity in the industry in West Virginia has since that time been transferred to the region along the Ohio River in Mason county. The change began in 1849. In this year Messrs. Williams & Stevens bored for salt water at West Columbia, and, striking a good flow of strong brine at 700 feet, erected the first salt furnace on the Ohio River. This was soon after sold to New York parties, and enlarged and improved by them to a capacity of 1,200 bushels per day. The second furnace on the Ohio was built in 1854 by a company formed by Hartford, Conn., parties. The first one was located at the southern limit of the coal exposures and the other at the northern limit. The third furnace was erected and wells were sunk at Mason City, about halfway between the others. Within the next few years 10 more furnaces were erected, making a total of 13, with an annual capacity of 3,700,000 bushels. At the time of the writing of Dr. Hale's report (1875), 4 of these furnaces were idle, and the actual output from the 9 other furnaces was reported by him at 2,500,000 bushels, or 500,000 barrels.

The census report for 1860 shows that the production of salt in those counties of Virginia which were set off from that state and, in 1863, admitted as the state of West Virginia, amounted to 2,076,513 bushels, or 415,303 barrels. By 1870 the production had increased to 4,633,750 bushels, or 926,750 barrels, an increase of 123.2 per cent. During the next decade the industry in West Virginia suffered from the competition brought about by developments in other states, and in 1880 the production had declined to 2,679,438 bushels, or 535,888 barrels. In 1890 it had dropped to 285,461 barrels, and had further decreased in 1899 to 221,534 barrels.

As shown in Table 3, all the salt made in West Virginia is made by the boiling process. There were 4 establishments in 1899, one less than at the preceding census. The salt is made entirely in grainers and kettles, there being 23 grainers and 36 kettles in operation in the state during 1899.

Table 6 presents the detailed statistics for the industry, by states, as reported at the Twelfth Census for the calendar year 1899.

TABLE 6.—SALT MANUFACTURE, BY STATES AND TERRITORIES: 1900.¹

| | The United States. | California. | Kansas. | Michigan. | New York. | Ohio. | Oklahoma. | Texas. | Utah. | West Virginia. | Nevada. | All other states. ² |
|---|--------------------|-------------|-----------|-------------|--------------|-----------|-----------|-----------|-----------|----------------|---------|--------------------------------|
| Number of establishments | 159 | 24 | 8 | 58 | 38 | 10 | 4 | 8 | 5 | 4 | 8 | 7 |
| Character of organization: | | | | | | | | | | | | |
| Individual | 56 | 15 | 2 | 15 | 10 | 1 | 4 | | 4 | 1 | 1 | 8 |
| Firm and limited partnership | 23 | 6 | | 11 | 3 | 2 | | | | | 1 | |
| Incorporated company | 80 | 3 | 6 | 27 | 25 | 7 | | 3 | 1 | 5 | 1 | 4 |
| Established during the decade | 43 | 5 | 6 | 16 | 5 | 3 | 3 | 1 | 3 | | | 1 |
| Established during the census year | 4 | 1 | | | 1 | | 1 | | | | | 1 |
| Capital: | | | | | | | | | | | | |
| Total | \$27,123,864 | \$757,895 | \$960,733 | \$4,759,805 | \$17,231,864 | \$796,841 | \$2,555 | \$927,036 | \$646,850 | \$931,200 | \$9,320 | \$1,299,205 |
| Land | \$3,494,557 | \$468,601 | \$68,732 | \$280,432 | \$6,987,587 | \$78,047 | \$275 | \$51,493 | \$540,010 | \$160,500 | \$3,350 | \$162,500 |
| Buildings | \$9,858,018 | \$36,000 | \$363,454 | \$884,128 | \$6,148,385 | \$265,400 | \$335 | \$115,876 | \$23,740 | \$69,500 | \$2,400 | \$450,800 |
| Machinery, tools, and implements | \$4,523,284 | \$102,511 | \$266,869 | \$1,037,072 | \$2,938,407 | \$908,000 | \$204 | \$30,000 | \$25,011 | \$32,500 | \$1,520 | \$281,200 |
| Cash and sundries | \$5,747,465 | \$150,723 | \$261,678 | \$2,528,288 | \$2,862,485 | \$142,394 | \$1,741 | \$76,667 | \$58,089 | \$18,700 | \$2,050 | \$114,705 |
| Proprietors and firm members | 81 | 28 | 2 | 29 | 5 | 3 | 4 | | 4 | | 3 | 3 |
| Salaried officials, clerks, etc.: | | | | | | | | | | | | |
| Total number | 406 | 87 | 32 | 91 | 157 | 48 | | 11 | 8 | 13 | | 9 |
| Total salaries | \$499,748 | \$37,128 | \$36,010 | \$87,249 | \$247,373 | \$42,218 | | \$17,070 | \$10,580 | \$13,540 | | \$3,580 |
| Officers of corporations— | | | | | | | | | | | | |
| Number | 87 | 5 | 9 | 24 | 24 | 13 | | 4 | 1 | 7 | | |
| Salaries | \$185,524 | \$9,600 | \$15,000 | \$31,879 | \$94,365 | \$12,680 | | \$8,600 | \$2,100 | \$10,700 | | |
| General superintendents, managers, clerks, and salesmen— | | | | | | | | | | | | |
| Total number | 319 | 32 | 23 | 67 | 133 | 35 | | 7 | 7 | 6 | | 9 |
| Total salaries | \$314,224 | \$27,528 | \$20,410 | \$55,370 | \$153,008 | \$29,538 | | \$3,470 | \$8,480 | \$2,840 | | \$3,580 |
| Men | | | | | | | | | | | | |
| Number | 291 | 31 | 21 | 61 | 121 | 29 | | 7 | 6 | 6 | | 9 |
| Salaries | \$299,382 | \$27,288 | \$19,210 | \$52,055 | \$144,624 | \$27,705 | | \$3,470 | \$8,000 | \$2,840 | | \$3,580 |
| Women: | | | | | | | | | | | | |
| Number | 28 | 1 | 2 | 6 | 12 | 6 | | | 1 | | | |
| Salaries | \$14,842 | \$240 | \$1,200 | \$2,705 | \$8,384 | \$1,833 | | | \$180 | | | |
| Wage-earners, including pieceworkers, and total wages: | | | | | | | | | | | | |
| Greatest number employed at any one time during the year | 6,612 | 468 | 496 | 2,133 | 1,799 | 848 | 11 | 213 | 120 | 220 | 13 | 291 |
| Least number employed at any one time during the year | 4,179 | 178 | 420 | 1,942 | 1,116 | 636 | 4 | 135 | 38 | 128 | 5 | 177 |
| Average number | 4,774 | 267 | 450 | 1,449 | 1,279 | 678 | 7 | 191 | 59 | 190 | 7 | 197 |
| Wages | \$1,911,140 | \$109,774 | \$168,034 | \$619,383 | \$542,009 | \$243,397 | \$1,100 | \$66,079 | \$23,702 | \$54,305 | \$3,670 | \$78,287 |
| Men, 16 years and over— | | | | | | | | | | | | |
| Average number | 4,337 | 260 | 429 | 1,940 | 1,137 | 643 | 7 | 179 | 58 | 186 | 6 | 192 |
| Wages | \$1,813,638 | \$107,604 | \$163,724 | \$595,041 | \$509,486 | \$215,975 | \$1,100 | \$61,929 | \$23,537 | \$54,305 | \$3,450 | \$77,537 |
| Women, 16 years and over— | | | | | | | | | | | | |
| Average number | 878 | 6 | 21 | 71 | 133 | 133 | | 12 | 1 | | 1 | |
| Wages | \$36,007 | \$1,927 | \$4,310 | \$16,027 | \$32,106 | \$27,102 | | \$4,150 | \$165 | | \$220 | |
| Children, under 16 years— | | | | | | | | | | | | |
| Average number | 59 | 1 | | 38 | 9 | 2 | | | | 4 | | 5 |
| Wages | \$11,495 | \$243 | | \$8,315 | \$1,367 | \$320 | | | | \$500 | | \$750 |
| Average number of wage-earners, including pieceworkers, employed during each month: | | | | | | | | | | | | |
| Men, 16 years and over: | | | | | | | | | | | | |
| January | 3,402 | 153 | 480 | 760 | 943 | 484 | 9 | 186 | 42 | 209 | 3 | 183 |
| February | 3,375 | 162 | 408 | 778 | 941 | 587 | 9 | 186 | 40 | 197 | 3 | 164 |
| March | 3,657 | 190 | 412 | 946 | 985 | 554 | 9 | 154 | 36 | 195 | 4 | 173 |
| April | 4,472 | 224 | 406 | 1,356 | 1,330 | 563 | 7 | 167 | 38 | 203 | 5 | 173 |
| May | 4,877 | 250 | 435 | 1,649 | 1,328 | 604 | 6 | 176 | 63 | 197 | 5 | 164 |
| June | 4,834 | 230 | 418 | 1,666 | 1,219 | 641 | 5 | 189 | 88 | 194 | 6 | 178 |
| July | 4,975 | 260 | 429 | 1,721 | 1,220 | 567 | 4 | 191 | 85 | 194 | 9 | 195 |
| August | 5,046 | 413 | 437 | 1,752 | 1,249 | 510 | 4 | 192 | 80 | 201 | 5 | 203 |
| September | 4,880 | 423 | 438 | 1,569 | 1,233 | 566 | 5 | 195 | 62 | 177 | 5 | 207 |
| October | 4,488 | 355 | 449 | 1,506 | 1,100 | 491 | 7 | 189 | 50 | 139 | 12 | 190 |
| November | 4,301 | 291 | 450 | 1,409 | 1,102 | 491 | 10 | 188 | 64 | 150 | 10 | 226 |
| December | 3,734 | 154 | 432 | 965 | 993 | 513 | 10 | 186 | 53 | 175 | 7 | 246 |
| Women, 16 years and over: | | | | | | | | | | | | |
| January | 336 | 10 | 22 | 36 | 135 | 118 | | 13 | 1 | | 1 | |
| February | 325 | 10 | 23 | 46 | 118 | 118 | | 8 | 1 | | 1 | |
| March | 356 | 10 | 23 | 64 | 119 | 129 | | 9 | 1 | | 1 | |
| April | 403 | 6 | 21 | 80 | 149 | 132 | | 13 | 1 | | 1 | |
| May | 443 | 13 | 22 | 99 | 156 | 138 | | 13 | 1 | | 1 | |
| June | 384 | 2 | 17 | 98 | 125 | 127 | | 13 | 1 | | 1 | |
| July | 371 | 3 | 16 | 87 | 117 | 133 | | 13 | 1 | | 1 | |
| August | 372 | 3 | 19 | 82 | 123 | 130 | | 13 | 1 | | 1 | |
| September | 397 | 3 | 19 | 87 | 126 | 147 | | 13 | 1 | | 1 | |
| October | 385 | 3 | 23 | 67 | 143 | 134 | | 13 | 1 | | 1 | |
| November | 395 | 7 | 23 | 60 | 147 | 143 | | 13 | 1 | | 1 | |
| December | 370 | 6 | 22 | 50 | 132 | 146 | | 13 | 1 | | 1 | |
| Children, under 16 years: | | | | | | | | | | | | |
| January | 17 | 1 | | 1 | 4 | 1 | | | | 5 | | 5 |
| February | 17 | 1 | | 1 | 4 | 1 | | | | 5 | | 5 |
| March | 27 | 1 | | 5 | 10 | 1 | | | | 5 | | 5 |
| April | 66 | 1 | | 44 | 10 | 1 | | | | 5 | | 5 |
| May | 69 | 1 | | 45 | 11 | 2 | | | | 5 | | 5 |
| June | 75 | 1 | | 51 | 11 | 2 | | | | 5 | | 5 |
| July | 82 | 1 | | 58 | 11 | 2 | | | | 5 | | 5 |
| August | 87 | 1 | | 64 | 10 | 2 | | | | 5 | | 5 |
| September | 67 | 1 | | 46 | 10 | 3 | | | | 2 | | 5 |
| October | 74 | 1 | | 53 | 10 | 3 | | | | 2 | | 5 |
| November | 68 | 1 | | 46 | 10 | 3 | | | | 3 | | 5 |
| December | 59 | 1 | | 36 | 9 | 3 | | | | 5 | | 5 |
| Miscellaneous expenses: | | | | | | | | | | | | |
| Total | \$760,539 | \$30,990 | \$52,798 | \$193,915 | \$329,701 | \$93,342 | \$350 | \$6,255 | \$24,065 | \$9,838 | \$1,110 | \$13,175 |
| Rent of works | \$42,340 | \$9,458 | \$500 | \$850 | \$21,671 | \$21,671 | \$246 | | \$4,275 | | | \$5,540 |
| Taxes, not including internal revenue | \$71,067 | \$2,504 | \$5,793 | \$29,217 | \$19,069 | \$6,656 | \$69 | \$2,235 | \$402 | \$2,404 | \$110 | \$2,608 |
| Rent of offices, insurance, interest and all sundry expenses not hitherto included | \$621,855 | \$19,028 | \$46,505 | \$140,548 | \$288,161 | \$55,709 | \$35 | \$4,020 | \$19,388 | \$7,434 | \$1,000 | \$10,027 |
| Contract work | \$25,277 | | | \$23,500 | \$800 | \$977 | | | | | | |

¹ The report for the Twelfth Census is for the calendar year 1899.² Distributed as follows: Illinois, 1; Louisiana, 2; Massachusetts, 2; Pennsylvania, 1; Virginia, 1.

TABLE 6.—SALT MANUFACTURE, BY STATES AND TERRITORIES: 1900¹—Continued.

| | The United States. | California. | Kansas. | Michigan. | New York. | Ohio. | Oklahoma. | Texas. | Utah. | West Virginia. | Nevada. | All other states. ² |
|--|--------------------|-------------|-----------|-------------|-------------|-----------|-----------|-----------|------------|----------------|----------|--------------------------------|
| Materials used: | | | | | | | | | | | | |
| Total cost..... | \$3,335,922 | \$116,712 | \$327,890 | \$1,095,780 | \$958,802 | \$423,875 | \$1,235 | \$141,342 | \$31,750 | \$57,398 | \$2,876 | \$178,753 |
| Barrels, bags, sacks, cartons, etc., purchased..... | \$997,503 | \$89,662 | \$49,072 | \$355,451 | \$335,495 | \$52,888 | — | \$44,793 | \$25,283 | \$4,700 | \$2,612 | \$38,042 |
| Cooperage stock purchased..... | \$775,411 | — | \$124,061 | \$352,014 | \$157,611 | \$50,268 | — | \$13,000 | — | \$15,548 | — | \$23,909 |
| Cloth purchased for sacks..... | \$64,208 | \$1,300 | — | \$3,708 | — | \$58,470 | — | — | \$500 | — | — | — |
| Fuel..... | \$991,248 | \$10,404 | \$119,036 | \$274,059 | \$303,864 | \$140,239 | \$230 | \$10,399 | \$3,874 | \$25,500 | \$157 | \$61,740 |
| Rent of power and heat..... | \$2,111 | \$1,721 | — | — | \$140 | — | — | — | — | — | — | — |
| Mill supplies..... | \$192,777 | \$2,632 | \$6,306 | \$50,312 | \$63,767 | \$24,163 | — | \$4,150 | \$931 | \$1,600 | \$17 | \$38,839 |
| All other materials..... | \$189,747 | \$3,442 | \$3,980 | \$24,955 | \$83,581 | \$32,222 | \$25 | \$5,000 | \$366 | \$10,050 | — | \$16,223 |
| Freight..... | \$122,917 | \$2,551 | \$25,375 | \$35,885 | \$6,841 | \$18,125 | — | \$34,000 | \$50 | — | \$90 | — |
| Products: | | | | | | | | | | | | |
| Total value..... | \$7,966,897 | \$380,193 | \$717,449 | \$2,460,538 | \$2,698,691 | \$818,200 | \$4,320 | \$256,000 | \$139,488 | \$150,202 | \$12,606 | \$328,121 |
| Salt, including value of packages: | | | | | | | | | | | | |
| Number of barrels..... | 15,187,819 | 640,420 | 1,645,850 | 5,206,510 | 4,894,952 | 1,460,516 | 4,856 | 312,436 | 235,671 | 221,534 | 7,671 | 558,003 |
| Value..... | \$7,901,836 | \$380,193 | \$717,449 | \$2,451,964 | \$2,698,571 | \$804,872 | \$4,329 | \$256,000 | \$139,488 | \$130,492 | \$12,696 | \$304,882 |
| Table and dairy salt: number of barrels..... | 1,866,058 | 128,779 | 56,624 | 233,713 | 1,028,808 | 375,739 | 1,720 | 31,286 | 1,485 | 5,000 | 3,000 | — |
| Common fine..... | 6,866,125 | 83,671 | 47,157 | 4,076,497 | 1,051,619 | 887,445 | 1,773 | 220,000 | — | 216,584 | 857 | 828,173 |
| Common coarse..... | 2,635,282 | 128,852 | 1,072,676 | 820,259 | 397,664 | 84,882 | 676 | 44,721 | 62,115 | — | 2,457 | 20,980 |
| Packers'..... | 182,330 | 47,143 | — | 19,119 | 4,313 | 112,350 | — | — | — | — | — | — |
| Coarse solar..... | 910,374 | 282,122 | 714 | 17,748 | 523,724 | — | 778 | 10,000 | 75,893 | — | — | 208,850 |
| Rock salt, mined..... | 2,543,679 | 250 | 468,029 | — | 1,866,650 | — | — | — | — | — | — | — |
| Milling..... | 96,178 | 7,200 | — | — | — | — | — | — | 88,907 | — | 71 | — |
| Other grades..... | 86,592 | 12,503 | 250 | 39,179 | 19,174 | — | — | 6,429 | 7,271 | — | 1,786 | — |
| Bromine: | | | | | | | | | | | | |
| Pounds..... | 279,437 | — | — | 27,684 | — | 62,611 | — | — | — | 98,000 | — | 96,812 |
| Value..... | \$64,921 | — | — | \$8,554 | — | \$13,328 | — | — | — | \$19,800 | — | \$23,239 |
| Value of all other products..... | \$140 | — | — | \$20 | \$120 | — | — | — | — | — | — | — |
| Value of packages included in foregoing..... | \$2,032,474 | \$93,992 | \$174,158 | \$320,058 | \$515,311 | \$231,808 | \$100 | \$59,793 | \$25,788 | \$26,705 | \$2,612 | \$67,189 |
| Comparison of products: | | | | | | | | | | | | |
| Number of establishments reporting for both years..... | 114 | 17 | 5 | 39 | 25 | 8 | 4 | 2 | 3 | 3 | 3 | 5 |
| Value for census year..... | \$5,000,310 | \$270,143 | \$310,899 | \$1,627,181 | \$1,658,958 | \$341,200 | \$4,329 | \$241,300 | \$135,738 | \$110,692 | \$12,696 | \$287,174 |
| Value for preceding business year..... | \$4,405,762 | \$214,610 | \$211,911 | \$1,392,160 | \$1,421,635 | \$474,639 | \$3,455 | \$197,000 | \$89,001 | \$105,900 | \$9,500 | \$289,501 |
| Processes employed: | | | | | | | | | | | | |
| Covers or ponds: | | | | | | | | | | | | |
| Number..... | 85,222 | 474 | 90 | 2,000 | 32,295 | 4 | 13 | 14 | 39 | — | 2 | 342 |
| Square feet..... | 109,921,300 | 62,062,800 | 144,656 | 545,300 | 8,176,648 | 12,320 | 92,120 | 135,680 | 33,610,728 | — | 30,000 | 110,868 |
| Grainers..... | 522 | — | 13 | 273 | 92 | 83 | 2 | 24 | — | 23 | — | 12 |
| Open pans..... | 264 | 2 | 36 | 17 | 43 | 38 | 21 | — | — | — | — | 105 |
| Kettles..... | 411 | — | 5 | 338 | 31 | — | — | — | — | — | — | — |
| Vacuum pans..... | 40 | 1 | 19 | 9 | 5 | — | — | — | 1 | 36 | — | 6 |
| Power: | | | | | | | | | | | | |
| Number of establishments reporting..... | 117 | 11 | 7 | 48 | 28 | 10 | — | 2 | 4 | 4 | 1 | 2 |
| Total horsepower..... | 24,000 | 876 | 2,130 | 10,625 | 7,781 | 1,312 | — | 56 | 108 | 320 | 42 | 1,410 |
| Owned: | | | | | | | | | | | | |
| Engines: | | | | | | | | | | | | |
| Steam: | | | | | | | | | | | | |
| Number..... | 80 | 9 | 18 | 133 | 150 | 37 | — | 8 | 2 | 16 | 3 | 9 |
| Horsepower..... | 23,104 | 288 | 2,052 | 10,149 | 7,770 | 1,052 | — | 37 | 90 | 318 | 42 | 1,360 |
| Gas or gasoline: | | | | | | | | | | | | |
| Number..... | 13 | 7 | 1 | — | — | — | — | 2 | — | 1 | — | 2 |
| Horsepower..... | 182 | 93 | 8 | — | — | — | — | 19 | — | 2 | — | 60 |
| Water wheels: | | | | | | | | | | | | |
| Number..... | 1 | — | — | — | — | — | — | — | 1 | — | — | — |
| Horsepower..... | 8 | — | — | — | — | — | — | — | 8 | — | — | — |
| Electric motors: | | | | | | | | | | | | |
| Number..... | 8 | — | — | 6 | — | 2 | — | — | — | — | — | — |
| Horsepower..... | 195 | — | — | 160 | — | 35 | — | — | — | — | — | — |
| Other power: | | | | | | | | | | | | |
| Number..... | 9 | — | 1 | 4 | — | 3 | — | — | 1 | — | — | — |
| Horsepower..... | 521 | — | 70 | 216 | — | 225 | — | — | 10 | — | — | — |
| Furnished to other establishments: | | | | | | | | | | | | |
| Rented horsepower..... | 200 | — | — | 200 | — | — | — | — | — | — | — | — |
| Establishments classified by number of persons employed, not including proprietors and firm members: | | | | | | | | | | | | |
| Total number of establishments..... | 159 | 24 | 8 | 53 | 98 | 10 | 4 | 3 | 5 | 4 | 3 | 7 |
| No employees..... | 2 | — | — | 1 | — | — | — | — | — | — | — | 1 |
| Under 5..... | 22 | 6 | 1 | 7 | 2 | — | 3 | — | 1 | — | — | 1 |
| 5 to 20..... | 53 | 9 | 3 | 19 | 15 | 1 | 1 | 1 | 2 | — | — | 1 |
| 21 to 50..... | 33 | 5 | 2 | 8 | 8 | — | — | — | 1 | — | — | 2 |
| 51 to 100..... | 33 | 4 | 1 | 16 | 8 | 3 | — | — | 1 | — | — | 3 |
| 101 to 250..... | 6 | — | — | — | 4 | 1 | — | — | — | — | — | — |
| 251 to 500..... | 6 | — | 1 | 2 | 1 | 1 | — | — | — | — | — | — |

¹ The report for the Twelfth Census is for the calendar year 1899.² Distributed as follows: Illinois, 1; Louisiana, 2; Massachusetts, 2; Pennsylvania, 1; Virginia, 1.

CENSUS BULLETIN.

No. 117.

WASHINGTON, D. C.

December 3, 1901.

MANUFACTURES.

ALABAMA.

HON. WILLIAM R. MERRIAM,
Director of the Census.

SIR: I transmit herewith, for publication in bulletin form, the statistics of manufacturing and mechanical industries for the state of Alabama for the census year 1900, taken in accordance with the provisions of section 7 of the act of March 3, 1899. This section requires that "The schedules of inquiries relating to the products of manufacturing and mechanical establishments shall embrace the name and location of each establishment; character of organization, whether individual, cooperative, or other form; date of commencement of operations; character of business or kind of goods manufactured; amount of capital invested; number of proprietors, firm members, copartners, or officers, and the amount of their salaries; number of employees, and the amount of their wages; quantity and cost of materials used in manufactures; amount of miscellaneous expenses; quantity and value of products; time in operation during the census year; character and quantity of power used; and character and number of machines employed."

In each of the above particulars the requirements of the law have been observed, but certain of the data thus elicited are reserved for publication in the final volumes.

There were 18 cities and towns in the state withdrawn from the enumerators and their manufacturing statistics collected by special agents, in accordance with the further provision of section 7 of the Census Act. Wherever the phrase "urban manufactures" is used in this bulletin, it applies only to those cities or towns which were withdrawn from the enumerators and committed to special agents, and only to manufacturing establishments within the corporate limits of such places.

Three cities in Alabama contain a population exceeding 20,000 each: Birmingham, Mobile, and Montgomery. The manufacturing statistics of these 3 cities are presented by specified industries and in comparison with the returns of the Eleventh Census.

Mr. James Bawron, of Birmingham, rendered valuable assistance in the preparation of the text for the accompanying report.

The statistics of Alabama are presented in 9 tables: Table 1 showing comparative figures for the state at the several censuses; Table 2 showing all the industries of the state divided between the hand trades and the manufactures proper, and also the statistics of educational, eleemosynary, and penal institutions, and establishments with a product of less than \$500, which two latter classes were not reported at previous censuses; Table 3 showing the statistics of the 11 leading industries of the state for 1890 and 1900; Table 4 showing the totals for the cities of Birmingham, Mobile, and Montgomery at the censuses of 1890 and 1900; Table 5 showing the urban manufactures of the state in comparison with the totals for the entire state and the state exclusive of the cities and towns withdrawn from the enumerators; Table 6 showing the statistics for the state by counties; Table 7 showing the statistics for the state by specified industries; Table 8 showing the statistics of the cities of Birmingham, Mobile, and Montgomery by specified industries; and Table 9 showing the totals for all industries in each of the cities and towns withdrawn from the enumerators (exclusive of those shown in Table 8).

Table 1 shows the growth of manufactures in Alabama for the half century which terminates with the Twelfth Census. The manufacturing statistics of the censuses prior to 1850 were too imperfect and fragmentary in character to make it proper to reproduce them in such a table as a measure of industrial growth in the first half of the century. Owing to changes in the method of taking the census, comparisons between the earlier and later decades, represented in Table 1, should be drawn only in the most general way. Nevertheless, the rate of growth in Alabama manufactures may be fairly inferred from the figures given.

In drafting the schedules of inquiry for the census of

1900 care was taken to preserve the basis of comparison with prior censuses. Comparison may be made safely with respect to all the items of inquiry except those relating to capital, salaried officials, clerks, etc., and their salaries, the average number of employees, and the total amount of wages paid. Live capital, that is, cash on hand, bills receivable, unsettled ledger accounts, raw materials, stock in process of manufacture, finished products on hand, and other sundries, was first called for at the census of 1890. No definite attempt was made, prior to the census of 1890, to secure a return of live capital invested.

Changes were made in the inquiries relating to employees and wages in order to eliminate defects found to exist on the form of inquiry adopted in 1890. At the census of 1890 the average number of persons employed during the entire year was called for, and also the average number employed at stated weekly rates of pay, and the average number was computed for the actual time the establishments were reported as being in operation. At the census of 1900 the greatest and least numbers of employees were reported, and also the average number employed during each month of the year. The average number of wage-earners (men, women, and children) employed during the entire year was ascertained by using 12; the number of calendar months, as a divisor into the total of the average numbers reported for each month. This difference in the method of ascertaining the average number of wage-earners during the entire year may have resulted in a variation in the number, and should be considered in making comparisons.

At the census of 1890 the number and salaries of proprietors and firm members actively engaged in the business or in supervision were reported, combined with clerks and other officials. In cases where proprietors and firm members were reported without salaries, the amount that would ordinarily be paid for similar services was estimated. At the census of 1900 only the number of proprietors and firm members actively engaged in the industry or in supervision was ascertained, and no salaries were reported for this class. It is therefore impossible to compare the number and salaries of salaried officials of any character for the two censuses.

Furthermore, the schedules for 1890 included in the wage-earning class, overseers, foremen, and superintendents (not general superintendents or managers), while the census of 1900 separates from the wage-earning class such salaried employees as general superintendents, clerks, and salesmen. It is possible and probable that this change in the form of the question has resulted in eliminating from the wage-earners, as reported by the present census, many high-salaried employees included in that group for the census of 1890.

In some instances, the number of proprietors and firm members, shown in the accompanying tables, falls short of the number of establishments reported. This is accounted for by the fact that no proprietors or firm members are reported for corporations or cooperative establishments. The number of salaried officials, clerks, etc., is the greatest number reported employed at any one time during the year. For the cotton ginning industry this number may appear excessive as compared with the amount of salaries paid, but

allowance should be made for the fact that a considerable number of clerks are employed for only a part of the year; consequently the amount they receive would be small if reckoned as an annual salary.

The reports show a capital of \$70,370,081 invested in manufactures and mechanical industries in the 5,602 establishments reporting for the state of Alabama. This sum represents the value of land, buildings, machinery, tools, and implements, and the live capital utilized, but does not include the capital stock of any of the manufacturing corporations of the state of Alabama. The value of the products is returned at \$82,793,804, to produce which involved an outlay of \$2,168,671 for salaries of officials, clerks, etc.; \$15,130,419 for wages; \$3,828,402 for miscellaneous expenses, including rent, taxes, etc.; and \$46,151,026 for materials used, mill supplies, freight, and fuel. It is not to be assumed, however, that the difference between the aggregate of these sums and the value of the products is, in any sense, indicative of the profits in the manufacture of the products during the census year. The census schedule takes no cognizance of the cost of selling manufactured articles, or of interest on capital invested, or of the mercantile losses incurred in the business, or of depreciation in plant. The value of the product given is the value as obtained or fixed at the shop or factory. This statement is necessary in order to avoid erroneous conclusions from the figures presented.

The value of products for the state of Alabama, \$82,793,804, is the gross value, and not the net or true value. The difference between these two should be carefully noted. The gross value is found by adding the values of products in the separate establishments. But the finished product of one establishment is often the raw material for another. In such cases the value of the former reappears in the latter, and thus the original cost of certain materials may be included several times in the gross value. The net or true value is found by subtracting from the gross value the value of all materials purchased in a partly manufactured form. In this way the duplications in the gross value are eliminated.

At the census of 1890 the schedule was so framed that it was impossible to find the net or true value. In the present census the schedule asked for the value of the materials in two classes, those purchased in the crude state and those purchased in the partly manufactured form. From the answers to these questions the net or true value of products may be computed. Thus, for Alabama, the gross value of products for 1900 was \$82,793,804. The value of materials purchased in a partly manufactured form was \$21,844,174. The difference, \$60,949,630, is the net or true value of products, and represents the increase in the value of raw materials resulting from the various processes of manufacture.

Very respectfully,



Chief Statistician for Manufactures.

ALABAMA.

Table 1 shows the manufacturing and mechanical industries of the state of Alabama as returned at the censuses of 1850 to 1900, inclusive, with the percentages of increase for each decade. This table also presents the average number of wage-earners employed by manufacturing estab-

lishments, in comparison with the total population of the state, and the value of the land and buildings owned and reported by manufacturers as capital, in comparison with the assessed value of all real estate and improvements.

TABLE 1.—COMPARATIVE SUMMARY, 1850 TO 1900, WITH PER CENT OF INCREASE FOR EACH DECADE.

| | DATE OF CENSUS. | | | | | | PER CENT OF INCREASE. | | | | |
|--|-----------------|---------------|------------------|------------------|------------------|------------------|-----------------------|--------------|--------------|--------------|--------------|
| | 1900 | 1800 | 1880 | 1870 | 1860 | 1850 | 1890 to 1900 | 1880 to 1890 | 1870 to 1880 | 1860 to 1870 | 1850 to 1860 |
| Number of establishments | 5,602 | 2,977 | 2,070 | 2,189 | 1,459 | 1,026 | 88.2 | 43.8 | 15.4 | 50.0 | 42.2 |
| Capital | \$70,370,081 | \$46,122,571 | \$9,668,008 | \$5,714,032 | \$9,093,181 | \$3,450,606 | 52.6 | 377.1 | 69.2 | 137.2 | 163.7 |
| Salaried officials, clerks, etc., number | 2,580 | 2,684 | (³) | (³) | (³) | (³) | 15.7 | | | | |
| Salaries | \$2,168,671 | \$1,876,282 | (³) | (³) | (³) | (³) | 15.6 | | | | |
| Wage-earners, average number | 52,902 | 31,137 | 10,019 | 8,248 | 7,889 | 4,936 | 69.9 | 210.8 | 21.5 | 4.6 | 59.8 |
| Total wages | \$15,130,419 | \$10,799,747 | \$2,500,504 | \$2,227,968 | \$2,182,940 | \$1,105,821 | 40.1 | 331.9 | 12.2 | 4.5 | 92.9 |
| Men, 16 years and over | 45,580 | 27,848 | 8,368 | 7,196 | 6,792 | 4,397 | 63.5 | 232.8 | 16.3 | 5.9 | 54.5 |
| Wages | \$14,073,456 | \$10,231,041 | (³) | (³) | (³) | (³) | 37.6 | | | | |
| Women, 16 years and over | 3,898 | 1,864 | 842 | 664 | 1,097 | 539 | 109.1 | 121.4 | 26.8 | 139.5 | 103.5 |
| Wages | \$704,099 | \$116,610 | (³) | (³) | (³) | (³) | 69.0 | | | | |
| Children, under 16 years | 8,474 | 1,425 | 809 | 388 | (³) | (³) | 143.8 | 76.1 | 108.5 | | |
| Wages | \$352,864 | \$152,096 | (³) | (³) | (³) | (³) | 182.0 | | | | |
| Miscellaneous expenses | \$8,828,402 | \$2,797,896 | (³) | (³) | (³) | (³) | 36.8 | | | | |
| Cost of materials used | \$46,151,026 | \$28,432,281 | \$8,545,520 | \$7,592,837 | \$5,489,068 | \$2,224,960 | 62.3 | 232.7 | 12.5 | 38.3 | 146.7 |
| Value of products, including custom work and repairing | \$82,793,804 | \$51,226,605 | \$13,565,504 | \$13,040,644 | \$10,588,590 | \$4,528,876 | 61.6 | 277.6 | 4.0 | 23.2 | 133.8 |
| Total population | 1,828,697 | 1,513,017 | 1,262,505 | 996,992 | 964,201 | 771,623 | 20.9 | 19.8 | 26.6 | 3.4 | 25.0 |
| Wage-earners engaged in manufactures | 52,902 | 31,137 | 10,019 | 8,248 | 7,889 | 4,936 | 69.9 | 210.8 | 21.5 | 4.6 | 59.8 |
| Per cent of total population | 2.9 | 2.1 | 0.8 | 0.8 | 0.8 | 0.6 | | | | | |
| Assessed value of real estate | \$158,390,273 | \$154,706,434 | \$77,374,008 | \$117,223,043 | \$155,034,089 | \$78,870,718 | 2.4 | 99.9 | 134.0 | 124.4 | 96.6 |
| Value of land and buildings invested in manufactures | \$24,978,478 | \$12,709,521 | (³) | (³) | (³) | (³) | 96.5 | | | | |
| Per cent of assessed value | 15.8 | 8.2 | | | | | | | | | |

¹ Decrease.

² Includes proprietors and firm members, with their salaries; number only reported in 1900. (See Table 7.)

³ Not reported separately.

⁴ Not reported.

⁵ As given for the year 1900 in the annual report of the auditor of the state of Alabama.

⁶ Does not include the value of rented property.

Although Alabama is an agricultural state, Table 1 shows that there has been a remarkable growth in the manufacturing and mechanical industries during the half century. The population increased during these years from 771,623 to 1,828,697, or 137 per cent, while the average number of wage-earners employed in manufacturing establishments increased from 4,936 to 52,902, or 971.8 per cent. This growth of the wage-earning class has been very marked in the last two decades and particularly in the decade 1890 to 1900, when the increase was 210.8 per cent as compared with an increase of 19.8 per cent in total population. In 1900 the average number of wage-earners in manufactures constituted 2.9 per cent of the total population as compared with eight-tenths of 1 per cent in 1880. But probably the best indication of the importance of the wage-earning class is afforded by the greatest number employed at any one time during the year. In 1900 this was 76,931, or 4.2 per cent of the total population of the state.

The rapid growth of the manufacturing industries of Alabama during the last twenty-five years is due to the utilization of the state's rich mineral resources which were neglected in the earlier years of the century. The develop-

ment of the iron industry and of coal mining has stimulated a variety of manufactures which are centered in the Birmingham district, in the northern part of the state where the mineral deposits exist. The abundance of coal has made unnecessary any extensive use of the waterpower of the state on the Coosa, Tennessee, and Tallapoosa rivers, although on the Tallapoosa near Montgomery one of the largest waterpower plants in the South has recently been constructed.¹ It is noteworthy that the great development of manufactures in the northern part of the state has taken place largely without the advantage of navigable water for the cheap shipment of products. For years efforts have been made to connect the Birmingham district with tidewater at Mobile Bay by means of a canal and the construction of locks on the Warrior River. Of the 5 locks projected 3 were completed in 1895, and a route for the canal has been surveyed by engineers of the United States. It is estimated that water communication with Mobile would reduce freight charges on iron 80 per cent.

¹ The Manufacturers' Record, December 14, 1899, page 12; The Tradesman Annual, January 1, 1900, page 109; Handbook of Alabama, 1892, by Saffold Berney, page 494.

Table 2 divides the industries of the state between the hand trades and the manufactures proper. This table also gives the statistics for educational, eleemosynary, and penal institutions, and establishments with a product of

less than \$500; these were not reported at previous censuses, and are, therefore, omitted from the other tables and their use confined to Table 2.

TABLE 2.—SUMMARY FOR ALL ESTABLISHMENTS.

| CLASSES. | Number of establishments. | Capital. | Proprietors and firm members. | WAGE-EARNERS. | | Miscellaneous expenses. | COST OF MATERIALS USED. | | | | Value of products, including custom work and repairing. |
|---|---------------------------|--------------|-------------------------------|-----------------|--------------|-------------------------|-------------------------|-------------------------|---|---------------------|---|
| | | | | Average number. | Total wages. | | Total. | Purchased in raw state. | Purchased in partially manufactured form. | Fuel, freight, etc. | |
| Total | 13,563 | \$72,486,449 | 15,410 | 60,703 | \$15,381,499 | \$3,878,113 | \$46,556,501 | \$17,906,094 | \$22,111,037 | \$6,539,370 | \$84,015,117 |
| Hand trades ¹ | 1,091 | 1,498,856 | 1,288 | 2,809 | 988,951 | 182,430 | 1,907,871 | 6,114 | 1,846,856 | 55,401 | 4,263,862 |
| Educational, eleemosynary, and penal institutions | 10 | 185,456 | 1 | 88 | 8,522 | 352 | 59,567 | 26,193 | 27,920 | 5,454 | 92,588 |
| Establishments with a product of less than \$500 | 7,951 | 1,980,912 | 8,665 | 7,718 | 242,558 | 49,359 | 345,908 | 106,965 | 238,943 | ----- | 1,128,725 |
| All other establishments | 4,511 | 68,871,225 | 5,456 | 50,038 | 14,141,468 | 3,645,972 | 44,243,155 | 17,766,822 | 19,997,818 | 6,478,515 | 78,529,942 |

¹ Includes bicycle and tricycle repairing, 35; blacksmithing and wheelwrighting, 452; boots and shoes, custom work and repairing, 118; carpentering, 73; clothing, men's, custom work and repairing, 54; clothing, women's, dressmaking, 19; dyeing and cleaning, 16; furniture, cabinetmaking, repairing, and upholstering, 19; lock and gun smithing, 14; masonry, brick and stone, 14; millinery, custom work, 110; painting, house, sign, etc., 16; paper hanging, 2; plastering and stuccowork, 1; plumbing, and gas and steam fitting, 47; sewing machine repairing, 6; typewriter repairing, 3; watch, clock, and jewelry repairing, 92.

Of the 13,563 establishments of all classes shown in this table, 9,042, or 66.7 per cent, were small shops included in the groups of "hand trades" and "establishments with a product of less than \$500." The value of the products of these establishments, consisting principally of the sums received for custom work and repairing,

amounted to \$5,392,587, or only 6.4 per cent of the total products of the state.

In addition to the 13,563 active establishments in the state during the census year, with a capital of \$72,486,449, shown in Table 2, there were 121 idle establishments, with a capital of \$3,388,916, divided as follows:

| INDUSTRIES. | Number of idle establishments. | Capital. | INDUSTRIES. | Number of idle establishments. | Capital. |
|-----------------------------------|--------------------------------|-----------|--|--------------------------------|----------|
| Brick and tile | 7 | \$10,285 | Leather, tanned, curried, and finished | 5 | \$3,700 |
| Coke | 1 | 20,000 | Lumber and timber products | 31 | 120,305 |
| Flouring and grist mill products | 8 | 11,207 | Lumber, planing mill products, including sash, doors, and blinds | 3 | 37,160 |
| Foundry and machine shop products | 1 | 84,499 | Pottery, terra cotta, and fire-clay products | 3 | 65,700 |
| Hardware | 1 | 37,700 | All other industries | 49 | 81,471 |
| Iron and steel | 12 | 2,966,889 | | | |

The 11 leading industries of the state in 1900, as shown in Table 3, embraced 3,335 establishments, or 59.5 per cent of the total number in the state; used a capital of \$57,809,426, or 82.2 per cent of the total; gave employment to 37,347 wage-earners, or 70.6 per cent of the total

number; and paid in wages \$10,657,960, or 70.4 per cent of the total. The value of their products was \$62,382,686, or 75.3 per cent of the total value of the products in the state.

TABLE 3.—COMPARATIVE SUMMARY OF ELEVEN LEADING INDUSTRIES.

| INDUSTRIES. | Year. | Number of establishments. | Capital. | WAGE-EARNERS. | | Miscellaneous expenses. | Cost of materials used. | Value of products, including custom work and repairing. |
|---|-------|---------------------------|--------------|-----------------|--------------|-------------------------|-------------------------|---|
| | | | | Average number. | Total wages. | | | |
| Total for selected industries for state | 1900 | 3,335 | \$57,809,426 | 37,347 | \$10,657,960 | \$2,658,306 | \$36,238,387 | \$62,382,686 |
| | 1890 | 1,544 | 35,863,769 | 20,657 | 6,598,977 | 1,904,398 | 20,862,385 | 84,814,502 |
| Increase, 1890 to 1900 | | 1,791 | 21,945,657 | 16,690 | 4,058,983 | 753,908 | 15,376,002 | 27,568,184 |
| Per cent of increase | | 116.0 | 61.2 | 80.8 | 61.5 | 39.6 | 73.7 | 79.2 |
| Per cent of total of all industries in state | 1900 | 59.5 | 82.2 | 70.6 | 70.4 | 69.4 | 78.5 | 75.3 |
| | 1890 | 51.9 | 77.8 | 66.3 | 61.1 | 68.1 | 73.4 | 68.0 |
| Cars and general shop construction and repairs by steam railroad companies. | 1900 | 19 | 2,019,434 | 4,030 | 1,941,031 | \$6,045 | 2,032,166 | 4,172,192 |
| | 1890 | 12 | 909,911 | 1,373 | 761,134 | ----- | 784,304 | 1,581,207 |
| Coke | 1900 | 15 | 3,853,379 | 1,592 | 535,622 | 180,290 | 2,673,568 | 3,726,483 |
| | 1890 | 19 | 1,368,238 | 1,120 | 432,143 | 7,994 | 1,810,274 | 2,474,377 |
| Cotton, ginning ¹ | 1900 | 1,216 | 2,006,406 | 1,518 | 194,133 | 42,560 | 291,729 | 1,218,283 |
| | 1890 | 212 | 289,223 | 792 | 57,161 | 14,263 | 85,982 | 213,529 |
| Cotton goods | 1900 | 31 | 11,638,757 | 8,332 | 1,482,226 | 511,296 | 4,825,981 | 8,153,136 |
| | 1890 | 18 | 2,853,015 | 2,088 | 402,908 | 154,893 | 1,459,048 | 2,190,771 |
| Fertilizers | 1900 | 17 | 1,407,323 | 439 | 94,965 | 92,704 | 1,387,385 | 2,063,162 |
| | 1890 | 8 | 709,250 | 230 | 42,835 | 48,715 | 519,713 | 765,000 |

¹ Does not include many ginneries operated in connection with saw, grist, and cottonseed oil mills, or for the use exclusively of plantations on which they are located. For the full number of ginneries in operation, reference should be made to the special report on cotton ginning.

TABLE 3.—COMPARATIVE SUMMARY OF ELEVEN LEADING INDUSTRIES—Continued.

| INDUSTRIES. | Year. | Number of establishments. | Capital. | WAGE-EARNERS. | | Miscellaneous expenses. | Cost of materials used. | Value of products, including custom work and repairing. |
|---|-------|---------------------------|-------------|-----------------|--------------|-------------------------|-------------------------|---|
| | | | | Average number. | Total wages. | | | |
| Flouring and grist mill products..... | 1900 | 781 | \$1,047,961 | 540 | \$92,858 | \$34,654 | \$2,787,694 | \$3,310,757 |
| | 1890 | 702 | 1,410,780 | 1,043 | 157,184 | 56,535 | 2,471,828 | 3,060,452 |
| Foundry and machine shop products..... | 1900 | 74 | 4,826,825 | 3,461 | 1,329,566 | 298,558 | 2,755,921 | 5,482,441 |
| | 1890 | 41 | 2,355,258 | 1,460 | 736,002 | 113,262 | 817,023 | 2,195,913 |
| Iron and steel..... | 1900 | 25 | 15,018,479 | 7,238 | 2,454,401 | 896,126 | 10,062,094 | 17,392,483 |
| | 1890 | 35 | 17,879,583 | 5,685 | 2,202,904 | 1,089,690 | 7,423,344 | 12,544,227 |
| Leather, tanned, curried, and finished..... | 1900 | 18 | 464,005 | 165 | 71,440 | 44,107 | 672,017 | 1,005,358 |
| | 1890 | 21 | 33,045 | 41 | 7,997 | 1,546 | 42,539 | 77,066 |
| Lumber and timber products..... | 1900 | 1,111 | 13,020,183 | 9,273 | 2,265,018 | 277,521 | 6,646,124 | 12,867,551 |
| | 1890 | 472 | 7,460,103 | 6,335 | 1,712,336 | 330,497 | 4,551,261 | 8,507,971 |
| Oil, cottonseed and cake..... | 1900 | 28 | 1,009,674 | 759 | 196,700 | 194,450 | 2,103,768 | 2,985,890 |
| | 1890 | 9 | 592,408 | 490 | 86,363 | 87,003 | 945,069 | 1,203,989 |

Table 3 shows that the manufacture of iron and steel is the most important industry in the state. The 25 establishments reported for this industry in 1900 gave employment to 7,238 wage-earners, or 13.7 per cent of the wage-earners in the state, and the products were valued at \$17,392,483, or 21 per cent of the total value of the products of the state. In 1890 there were 35 establishments reported, with 5,685 wage-earners, and products valued at \$12,544,227. The increase in the value of products during the decade was \$4,848,256, or 38.6 per cent.

The importance of the iron and steel industry in Alabama is directly due to the development of extensive deposits of iron ore, coal, limestone, and dolomite, which are found in most unusual proximity in the Birmingham district. This combination of natural advantages makes it possible to produce pig iron at very low cost. A charcoal furnace was built as early as 1818,¹ but it was not until 1874 that the manufacture began to assume importance. Birmingham, named after England's iron center, was founded in 1871, Anniston in 1872, Sheffield in 1883, and Bessemer in 1887. An important epoch in the history of the industry began in 1895, when it was demonstrated that Alabama pig iron could be laid down in Liverpool, grade for grade, at less than the price of Middlesboro iron shipped across England to that point.² Exports to England, continental Europe, and Japan in 1896 amounted to 65,000 tons,³ and in 1900 to 113,185 tons, a quantity greatly in excess of that reported for any other state. The total production of pig iron in the state in 1860 was valued at \$64,590, in 1870 at \$210,258, in 1880 at \$1,405,356, in 1890 at \$10,315,691, and in 1900 at \$13,465,616. The most important grade manufactured in the state in 1900 was foundry iron, no other state producing so large a quantity.

Although the manufacture of steel in Alabama is in its infancy, every indication points to a development as rapid as that shown in pig iron. It seems to be established that

¹ Iron Making in Alabama, page 8.

² The Tradesman Annual, January 1, 1896, page 103.

³ Iron Making in Alabama, Second edition, 1898, by W. B. Phillips, consulting chemist of the Alabama Geological Survey, page 15.

the iron ores of Alabama are not suited to the manufacture of steel by the acid or basic Bessemer processes, because of their large percentage of phosphorus and silica, and therefore manufacturers using these ores are practically restricted to the basic open-hearth process. The first attempt to manufacture steel in the state was made in 1888, but until 1897 only indifferent success was attained.⁴ In 1900 there were 12 basic open-hearth furnaces in the state with a daily capacity of 1,210 tons of steel ingots. The manufacture was greatly stimulated by the fact that many engineers and architects, in 1896, began to show a preference for open-hearth steel, stipulating in their specifications that this variety should be used.⁵

Related to the iron and steel industry is the manufacture of foundry and machine shop products. There were 74 establishments engaged in this industry in 1900, with 3,461 wage-earners, and products valued at \$5,482,441. In 1890 there were 41 establishments reported, with 1,460 wage-earners, and products valued at \$2,195,913. The value of products increased \$3,286,528, or 149.7 per cent during the decade. This industry has been stimulated by the large production of pig iron, and has in turn reacted to increase that production. One of the most important of Alabama's foundry products is cast-iron pipe. There were 11 establishments, most of them at Bessemer, Anniston, and Birmingham, engaged in this manufacture during the census year. Some of these export products to foreign countries. Other important iron products of the state are stoves, car wheels, boilers, and engines.

The various iron industries have continued to advance since the close of the census year. One of the largest plants in the United States for the manufacture of wire and wire nails has been put into operation at Ensley, a large establishment for the manufacture of steel cars is now being built at the same place, and a tube works and cotton tie plant has been started at Helena.

The manufacture of coke is also closely connected with the iron manufacture. There were 15 coke establishments in Alabama in 1900, with 1,592 wage-earners, and products

⁴ Ibid., pages 290, 296, and 312.

⁵ The Tradesman Annual, January 1, 1898, page 84.

valued at \$3,726,433, the state ranking third in the United States in this industry. In 1890 there were 19 establishments, 1,120 wage-earners, and products valued at \$2,474,377. The value of products increased \$1,252,056, or 50.6 per cent during the decade.

The manufacture of lumber and timber products ranks second. There were 1,111 establishments reported for 1900, with 9,273 wage-earners, and products valued at \$12,867,551. In 1890 there were 472 establishments engaged in this industry, with 6,335 wage-earners, and products valued at \$3,507,971. The increase in the value of products during the decade was \$4,359,580, or 51.2 per cent, and a considerable portion of Alabama's forests is yet untouched by the axe.¹ The lower part of the maritime pine belt is considered equal in extent and quality to the timber lands in the adjoining parts of Florida and Mississippi, and is said to be unsurpassed by the most favored sections of the Atlantic pine forest.² A large quantity of timber is floated down streams and sawed in the mills of Florida.³

Dependent also upon the forests of the state is the manufacture of turpentine and rosin. There were 152 establishments engaged in this industry in 1900, with 3,716 wage-earners, and products valued at \$2,033,705. The statistics of the 7 establishments reported in 1890 were not shown separately, and comparisons with that year are not possible.

There were 31 establishments engaged in the manufacture of cotton goods in 1900, the industry third in rank, with 8,332 wage-earners, and products valued at \$8,153,136. In 1890, 13 establishments were reported, with 2,088 wage-earners, and products valued at \$2,190,771. The increase in value of products during the decade was \$5,962,365, or 272.2 per cent, a greater absolute increase than is shown in any other industry in the state.

There were 19 establishments engaged in the construction and repair shop work of steam railroad companies in 1900, with 4,030 wage-earners, and products valued at \$4,172,192. In 1890 there were 12 establishments, 1,373 wage-earners, and products valued at \$1,581,207. The increase in the value of products was \$2,590,985, or 163.9 per cent. The development of this industry is due to the railroads connecting the Birmingham district with other parts of the country. Six roads center at the city of Birmingham, and several have shops there. Two large establishments, 1 at Anniston, and 1 at Gadsden, manufacture cars for steam railroads, but the statistics for these can not be shown separately without disclosing the operations of individual establishments.

¹ Handbook of Alabama, page 449.

² The Timber Pines of the Southern United States, page 38. (Bulletin No. 13, 1897, United States Department of Agriculture, Division of Forestry.)

³ *Ibid.*, pages 40 and 42.

There were 781 establishments engaged in flour and grist milling in 1900, with 540 wage-earners, and products valued at \$3,310,757. In 1890 there were 702 establishments, 1,043 wage-earners, and products valued at \$3,060,452. The increase in the value of products during the decade was \$250,305, or 8.2 per cent.

There were 28 establishments engaged in the manufacture of cottonseed oil and cake in 1900, with 759 wage-earners, and products valued at \$2,985,890. In 1890 there were 9 establishments, 490 wage-earners, and products valued at \$1,203,989. The increase in the value of products during the decade was \$1,781,901, or 148 per cent. Allied to this industry is cotton ginning, with 1,216 establishments in 1900, and 1,518 wage-earners. The receipts for ginning and other work done amounted to \$1,218,283. In 1890 there were 212 establishments reported, with 792 wage-earners, and the receipts for ginning and other work done amounted to \$213,529. The increase in these receipts during the decade was \$1,004,754, or 470.5 per cent. These figures do not include the operations of many private plantation ginneries, or ginneries connected with saw, grist, or cottonseed oil mills. For the full number of ginneries in operation reference should be made to the special report on cotton ginning. These two industries are directly dependent on the large cotton crop of the state, which in 1899 amounted to 1,103,690 commercial bales, or 11.4 per cent of the production of the United States.⁴

In 1900, 17 establishments were reported as engaged in the manufacture of fertilizers, with 439 wage-earners, and products valued at \$2,068,162. In 1890 there were 8 establishments, 230 wage-earners, and products valued at \$765,000. The value of products increased \$1,303,162, or 170.3 per cent, during the decade. This growth is due, on the one hand, to the extensive market for fertilizers in the cotton section of the state, and, on the other, to the large production of cottonseed meal. The principal fertilizer manufactured is a combination of this meal with phosphates from the adjacent fields of Florida.

In 1900, 18 establishments were reported as engaged in the tanning, currying, and finishing of leather, with 165 wage-earners, and products valued at \$1,005,358. In 1890 there were 21 establishments, 41 wage-earners, and products valued at \$77,066. The value of products increased \$928,292, or 1,204.5 per cent, during the decade.

URBAN MANUFACTURES.

Table 4 shows the totals for the manufacturing and mechanical industries of the cities of Birmingham, Mobile, and Montgomery, as returned at the censuses of 1890 and 1900, with the percentages of increase.

⁴ Census Bulletin, No. 58, Cotton Ginning, page 5.

TABLE 4.—COMPARATIVE SUMMARY, BIRMINGHAM, MOBILE, AND MONTGOMERY, 1890 AND 1900, WITH PER CENT OF INCREASE.

| | Year. | Number of establishments. | Capital. | WAGE-EARNERS. | | Miscellaneous expenses. | Cost of materials used. | Value of products, including custom work and repairing. |
|--|-------|---------------------------|--------------|-----------------|--------------|-------------------------|-------------------------|---|
| | | | | Average number. | Total wages. | | | |
| The State..... | 1900 | 5,602 | \$70,370,081 | 52,902 | \$15,130,419 | \$3,828,402 | \$46,151,026 | \$82,793,804 |
| Per cent of increase..... | 1890 | 2,977 | 46,122,571 | 81,137 | 10,799,747 | 2,797,896 | 28,432,281 | 51,226,605 |
| | | 88.2 | 52.6 | 69.9 | 40.1 | 36.8 | 62.8 | 61.6 |
| Birmingham..... | 1900 | 283 | 7,434,654 | 6,675 | 2,587,221 | 533,368 | 6,045,552 | 12,581,066 |
| Per cent of increase..... | 1890 | 283 | 4,558,478 | 3,247 | 1,663,312 | 545,290 | 3,508,588 | 7,031,248 |
| | | | 63.8 | 105.6 | 55.5 | 2.2 | 72.3 | 78.9 |
| Mobile..... | 1900 | 222 | 3,294,238 | 2,827 | 1,139,605 | 272,987 | 2,016,400 | 4,451,062 |
| Per cent of increase..... | 1890 | 261 | 2,236,818 | 2,719 | 950,270 | 226,987 | 1,814,463 | 3,826,399 |
| | | 114.9 | 47.3 | 4.0 | 19.9 | 20.3 | 12.8 | 16.3 |
| Montgomery..... | 1900 | 163 | 2,980,782 | 2,359 | 802,188 | 342,390 | 2,902,054 | 5,035,190 |
| Per cent of increase..... | 1890 | 138 | 1,684,271 | 1,689 | 634,423 | 140,829 | 1,753,166 | 3,234,962 |
| | | 18.1 | 74.0 | 39.7 | 26.4 | 143.5 | 65.5 | 55.6 |
| Total for 3 cities..... | 1900 | 668 | 13,659,674 | 11,861 | 4,529,014 | 1,149,245 | 10,994,006 | 22,067,318 |
| Per cent of increase..... | 1890 | 682 | 8,474,007 | 7,659 | 3,248,005 | 913,106 | 7,070,217 | 14,095,609 |
| | | 12.1 | 54.9 | 59.4 | 39.4 | 25.9 | 55.4 | 56.8 |
| Per cent of 3 cities to total for state..... | 1900 | 11.9 | 19.4 | 22.4 | 29.9 | 30.0 | 23.8 | 26.7 |
| | 1890 | 22.9 | 18.4 | 24.6 | 30.1 | 32.6 | 24.9 | 27.5 |

¹ Decrease.

It appears from Table 4 that there has been a considerable increase during the past decade in the manufactures of these cities. The average number of wage-earners increased from 7,655 to 11,861, or 54.9 per cent, and the value of products from \$14,095,609 to \$22,067,318, or 56.6 per cent. The number of establishments decreased, however, from 682 to 668, or 2.1 per cent. The increase in the average number of wage-earners and value of products has been smaller in these 3 cities than in the state as a whole. Birmingham, the leading manufacturing city, shows the greatest growth, the value of products having increased from \$7,034,248 in 1890 to \$12,581,066 in 1900, or 78.9 per cent. The number of establishments

remained the same as in 1890, that is 283, but the number of wage-earners increased from 3,247 to 6,675, or 105.6 per cent. The number of establishments, number of wage-earners, and value of products, in this city, in 1900, constituted 5.1, 12.6, and 15.2 per cent, respectively, of the totals for the entire state.

Table 5 presents the totals for the manufacturing industries of the 18 cities and towns withdrawn from the enumerators, places them in comparison with the totals for the entire state and the state exclusive of these cities and towns, and shows their rank in population and in value of products.

TABLE 5.—URBAN MANUFACTURES.

| | Number of establishments. | Capital. | Proprietors and firm members. | WAGE-EARNERS. | | Miscellaneous expenses. | Cost of materials used. | PRODUCTS. | | | POPULATION. | | |
|--|---------------------------|--------------|-------------------------------|-----------------|--------------|-------------------------|-------------------------|--------------|-------|--------------------|-------------|-------|--------------------|
| | | | | Average number. | Total wages. | | | Value. | Rank. | Per cent of total. | Total. | Rank. | Per cent of total. |
| Total for state..... | 5,602 | \$70,370,081 | 6,744 | 52,902 | \$15,130,419 | \$3,828,402 | \$46,151,026 | \$82,793,804 | ----- | 100.0 | 1,828,697 | ----- | 100.0 |
| Total for urban manufactures..... | 1,223 | 23,227,196 | 1,277 | 22,681 | 8,084,517 | 2,209,028 | 23,764,981 | 42,272,001 | ----- | 51.1 | 183,651 | ----- | 10.0 |
| Anniston..... | 59 | 2,396,278 | 52 | 1,997 | 649,993 | 134,530 | 1,414,873 | 2,594,758 | 6 | 3.1 | 9,695 | 4 | 0.5 |
| Bessemer..... | 42 | 3,020,082 | 33 | 1,669 | 605,741 | 317,590 | 2,206,654 | 3,581,549 | 5 | 4.3 | 6,358 | 8 | 0.3 |
| Birmingham..... | 283 | 7,434,654 | 284 | 6,675 | 2,587,221 | 533,368 | 6,045,552 | 12,581,066 | 1 | 15.2 | 39,415 | 2 | 2.1 |
| Decatur..... | 24 | 229,807 | 25 | 198 | 54,650 | 7,574 | 108,799 | 237,265 | 15 | 0.3 | 3,114 | 16 | 0.2 |
| Florence..... | 33 | 871,373 | 30 | 595 | 177,813 | 50,870 | 693,432 | 1,037,471 | 10 | 1.3 | 3,478 | 7 | 0.4 |
| Fort Payne..... | 17 | 85,405 | 21 | 88 | 37,982 | 4,206 | 71,652 | 155,016 | 16 | 0.2 | 1,037 | 18 | 0.1 |
| Gadsden..... | 35 | 1,184,805 | 47 | 520 | 165,475 | 24,180 | 463,733 | 848,751 | 11 | 1.0 | 4,282 | 12 | 0.2 |
| Huntsville..... | 79 | 1,877,781 | 85 | 1,203 | 283,575 | 152,637 | 1,011,868 | 1,890,461 | 8 | 2.3 | 8,068 | 6 | 0.4 |
| Mobile..... | 222 | 3,294,238 | 238 | 2,827 | 1,139,605 | 272,987 | 2,046,400 | 4,451,062 | 4 | 5.4 | 38,469 | 1 | 2.1 |
| Montgomery..... | 163 | 2,980,782 | 193 | 2,359 | 802,188 | 342,390 | 2,902,054 | 5,035,190 | 2 | 6.1 | 30,346 | 3 | 1.7 |
| New Decatur..... | 30 | 1,348,871 | 25 | 1,521 | 700,196 | 81,286 | 3,733,519 | 4,876,919 | 3 | 5.9 | 4,437 | 11 | 0.2 |
| Opelika..... | 30 | 148,275 | 34 | 214 | 48,023 | 10,943 | 206,885 | 335,670 | 14 | 0.4 | 4,245 | 13 | 0.2 |
| Phoenix..... | 6 | 33,595 | 5 | 16 | 4,548 | 5,361 | 7,644 | 22,850 | 18 | (¹) | 4,163 | 14 | 0.2 |
| Selma..... | 98 | 1,226,308 | 98 | 1,343 | 392,016 | 93,034 | 1,163,936 | 2,015,777 | 7 | 2.4 | 3,713 | 5 | 0.5 |
| Sheffield..... | 21 | 1,226,258 | 25 | 878 | 216,009 | 123,390 | 874,592 | 1,461,418 | 9 | 1.8 | 3,333 | 15 | 0.2 |
| Talladega..... | 22 | 848,414 | 13 | 343 | 77,311 | 25,979 | 427,544 | 583,902 | 12 | 0.7 | 5,056 | 10 | 0.3 |
| Tuscaloosa..... | 43 | 353,925 | 44 | 407 | 104,141 | 26,918 | 304,529 | 511,683 | 13 | 0.6 | 5,094 | 9 | 0.3 |
| Tusculum..... | 16 | 46,350 | 22 | 28 | 8,040 | 1,753 | 51,280 | 80,787 | 17 | 0.1 | 2,348 | 17 | 0.1 |
| Total for state exclusive of urban manufactures..... | 4,379 | 41,142,885 | 5,467 | 30,221 | 7,045,902 | 1,619,374 | 22,386,045 | 40,521,803 | ----- | 48.9 | 1,645,046 | ----- | 90.0 |
| Per cent of urban manufactures to total for state..... | 21.8 | 41.5 | 18.9 | 42.9 | 53.4 | 57.7 | 51.5 | 51.1 | ----- | ----- | 10.0 | ----- | ----- |

¹ Less than one-tenth of 1 per cent.

Of the 5,602 establishments in the state, 1,223, or 21.8 per cent, are located in these 18 cities and towns. They furnished employment to 22,681 wage-earners, or 42.9 per cent of the total number, and the value of their products, \$42,272,001, formed 51.1 per cent of the total for the state.

Table 6 shows the totals for the state by counties.

Table 7 shows the totals for the state by specified industries.

Table 8 shows the totals for the cities of Birmingham, Mobile, and Montgomery by specified industries.

Table 9 shows the totals for the cities and towns withdrawn from the enumerators, exclusive of those shown in Table 8.

TABLE 6.—MANUFACTURES

| COUNTIES AND MANUFACTURING AND MECHANICAL INDUSTRIES. | Number of establishments. | CAPITAL. | | | | | Proprietors and firm members. | SALARIED OFFICIALS, CLERKS, ETC. | | AVERAGE NUMBER OF WAGE-EARNERS AND TOTAL WAGES. | |
|---|---------------------------|--------------|--------------|--------------|-----------------------------------|--------------------|-------------------------------|----------------------------------|-------------|---|--------------|
| | | Total. | Land. | Buildings. | Machinery, tools, and implements. | Cash and sundries. | | Number. | Salaries. | Total. | |
| | | | | | | | | | | Average number. | Wages. |
| 1 The State..... | 5,602 | \$70,370,081 | \$10,021,049 | \$14,957,424 | \$24,159,595 | \$21,232,013 | 6,744 | 2,530 | \$2,168,671 | 52,902 | \$15,180,419 |
| 2 Antauga..... | 53 | 1,420,973 | 245,779 | 230,351 | 396,884 | 541,959 | 66 | 69 | 66,428 | 887 | 238,038 |
| 3 Baldwin..... | 41 | 1,377,882 | 865,184 | 44,600 | 245,552 | 222,546 | 45 | 40 | 30,710 | 666 | 156,711 |
| 4 Barbour..... | 74 | 615,859 | 55,023 | 95,093 | 330,312 | 125,981 | 76 | 23 | 15,315 | 600 | 97,048 |
| 5 Bibb..... | 53 | 746,569 | 399,941 | 25,040 | 229,387 | 92,201 | 61 | 12 | 6,749 | 398 | 90,379 |
| 6 Blount..... | 71 | 100,819 | 18,156 | 11,505 | 63,657 | 12,001 | 105 | 1 | 300 | 189 | 48,578 |
| 7 Bullock..... | 64 | 264,068 | 20,905 | 62,237 | 145,728 | 85,198 | 67 | 15 | 6,894 | 217 | 36,505 |
| 8 Butler..... | 51 | 789,931 | 191,941 | 57,315 | 390,998 | 149,677 | 57 | 20 | 19,660 | 638 | 173,225 |
| 9 Calhoun..... | 171 | 3,266,863 | 229,310 | 554,597 | 1,326,511 | 1,155,945 | 198 | 93 | 33,576 | 2,711 | 769,374 |
| 10 Chambers..... | 96 | 2,146,349 | 84,654 | 386,663 | 905,068 | 769,964 | 116 | 28 | 33,811 | 1,453 | 274,919 |
| 11 Cherokee..... | 73 | 306,881 | 27,056 | 114,145 | 98,161 | 67,519 | 92 | 10 | 9,659 | 201 | 42,402 |
| 12 Chilton..... | 49 | 548,458 | 169,085 | 55,745 | 243,866 | 79,762 | 64 | 12 | 11,050 | 413 | 88,030 |
| 13 Choctaw..... | 43 | 67,676 | 7,071 | 11,625 | 35,705 | 12,675 | 55 | 6 | 1,325 | 143 | 23,883 |
| 14 Clarke..... | 63 | 687,303 | 218,420 | 57,936 | 282,804 | 123,648 | 82 | 32 | 23,500 | 389 | 103,611 |
| 15 Clay..... | 62 | 237,886 | 48,574 | 11,288 | 107,860 | 70,714 | 92 | 5 | 4,475 | 263 | 48,778 |
| 16 Cleburne..... | 62 | 125,232 | 20,492 | 15,790 | 60,400 | 28,550 | 83 | 2 | 744 | 147 | 35,303 |
| 17 Coffee..... | 72 | 270,449 | 33,606 | 38,059 | 33,830 | 78,945 | 95 | 26 | 11,600 | 624 | 129,094 |
| 18 Colbert..... | 76 | 1,399,243 | 119,790 | 591,429 | 234,706 | 403,318 | 92 | 31 | 33,446 | 881 | 281,798 |
| 19 Conecuh..... | 65 | 226,326 | 107,882 | 18,006 | 57,056 | 43,382 | 82 | 10 | 5,060 | 344 | 78,357 |
| 20 Coosa..... | 47 | 87,428 | 16,841 | 12,890 | 46,735 | 10,972 | 61 | 3 | 792 | 119 | 26,503 |
| 21 Covington..... | 72 | 522,113 | 184,236 | 42,526 | 133,644 | 161,707 | 96 | 25 | 15,800 | 631 | 146,172 |
| 22 Crenshaw..... | 59 | 221,153 | 38,907 | 19,895 | 30,223 | 32,128 | 93 | 25 | 8,390 | 314 | 53,844 |
| 23 Cullman..... | 54 | 107,433 | 10,299 | 21,385 | 58,692 | 22,057 | 67 | 8 | 1,004 | 103 | 23,813 |
| 24 Dale..... | 56 | 145,193 | 15,018 | 26,002 | 57,846 | 46,237 | 63 | 9 | 3,786 | 189 | 35,376 |
| 25 Dallas..... | 170 | 1,448,852 | 86,463 | 252,138 | 642,968 | 466,723 | 179 | 140 | 106,828 | 1,489 | 416,561 |
| 26 Dekalb..... | 109 | 240,116 | 60,168 | 28,418 | 92,664 | 68,876 | 136 | 10 | 7,900 | 206 | 50,873 |
| 27 Elmore..... | 56 | 1,607,156 | 58,785 | 511,965 | 343,368 | 688,033 | 63 | 13 | 20,605 | 930 | 190,097 |
| 28 Escambia..... | 25 | 1,151,692 | 682,132 | 43,457 | 233,304 | 187,778 | 36 | 20 | 15,573 | 421 | 113,299 |
| 29 Etowah..... | 96 | 1,925,207 | 276,522 | 478,595 | 618,926 | 600,934 | 133 | 50 | 49,383 | 1,418 | 343,954 |
| 30 Fayette..... | 23 | 39,052 | 2,785 | 5,008 | 25,882 | 5,377 | 37 | 3 | 33 | 33 | 4,331 |
| 31 Franklin..... | 48 | 810,447 | 65,738 | 28,890 | 96,925 | 118,359 | 62 | 11 | 15,350 | 222 | 56,627 |
| 32 Geneva..... | 67 | 320,676 | 111,211 | 30,179 | 69,467 | 109,819 | 99 | 21 | 9,050 | 778 | 157,588 |
| 33 Greene..... | 33 | 46,177 | 1,832 | 8,530 | 34,975 | 1,490 | 37 | 4 | 515 | 46 | 6,249 |
| 34 Hale..... | 51 | 131,053 | 14,870 | 24,855 | 71,535 | 19,793 | 71 | 7 | 1,016 | 110 | 21,028 |
| 35 Henry..... | 136 | 883,380 | 60,204 | 41,786 | 139,568 | 135,822 | 169 | 42 | 14,540 | 694 | 139,017 |
| 36 Jackson..... | 108 | 295,629 | 41,915 | 44,311 | 126,953 | 82,450 | 137 | 20 | 13,883 | 384 | 87,135 |
| 37 Jefferson..... | 470 | 22,308,336 | 2,027,878 | 6,227,501 | 7,233,837 | 6,819,070 | 496 | 625 | 699,560 | 14,076 | 4,960,942 |
| 38 Lamar..... | 60 | 110,115 | 27,321 | 13,065 | 46,394 | 23,335 | 72 | 3 | 800 | 128 | 20,192 |
| 39 Lauderdale..... | 94 | 1,303,733 | 389,548 | 233,726 | 369,545 | 566,629 | 108 | 64 | 48,567 | 1,030 | 238,266 |
| 40 Lawrence..... | 55 | 94,061 | 23,495 | 12,815 | 43,930 | 14,421 | 66 | 2 | 609 | 79 | 12,331 |
| 41 Lee..... | 87 | 285,673 | 44,580 | 41,197 | 112,160 | 87,736 | 92 | 28 | 14,270 | 323 | 69,081 |
| 42 Limestone..... | 92 | 128,801 | 17,636 | 20,975 | 63,380 | 26,310 | 119 | 2 | 1,050 | 135 | 26,673 |
| 43 Lowndes..... | 56 | 92,695 | 4,550 | 22,795 | 61,775 | 3,575 | 62 | 6 | 937 | 90 | 13,117 |
| 44 Macon..... | 50 | 100,735 | 15,890 | 16,585 | 51,375 | 16,915 | 61 | 6 | 1,340 | 87 | 16,544 |
| 45 Madison..... | 168 | 2,093,841 | 110,637 | 321,805 | 919,547 | 741,302 | 197 | 66 | 60,018 | 1,490 | 344,204 |
| 46 Maringo..... | 80 | 440,619 | 54,167 | 91,589 | 220,692 | 74,171 | 84 | 33 | 19,639 | 422 | 77,110 |
| 47 Marion..... | 35 | 60,267 | 16,732 | 10,735 | 28,700 | 4,100 | 51 | 2 | 184 | 36 | 5,615 |
| 48 Marshall..... | 79 | 111,529 | 13,966 | 15,302 | 53,680 | 23,581 | 100 | 4 | 4,080 | 135 | 30,648 |
| 49 Noble..... | 278 | 5,681,918 | 1,230,206 | 764,794 | 1,802,177 | 1,884,741 | 303 | 294 | 251,248 | 4,762 | 1,744,115 |
| 50 Monroe..... | 57 | 417,908 | 130,437 | 26,630 | 133,870 | 71,921 | 64 | 20 | 12,130 | 476 | 99,043 |
| 51 Montgomery..... | 212 | 3,116,417 | 251,567 | 541,968 | 1,103,350 | 1,219,554 | 253 | 218 | 167,308 | 2,518 | 832,031 |
| 52 Morgan..... | 115 | 1,722,329 | 106,076 | 353,375 | 646,299 | 614,579 | 132 | 71 | 59,364 | 1,798 | 773,839 |
| 53 Perry..... | 74 | 184,446 | 14,145 | 33,595 | 102,069 | 29,634 | 90 | 16 | 4,969 | 115 | 22,622 |
| 54 Pickens..... | 58 | 94,249 | 17,553 | 15,290 | 48,260 | 13,046 | 74 | 1 | 100 | 89 | 13,204 |
| 55 Pike..... | 99 | 478,282 | 44,434 | 77,738 | 145,889 | 210,221 | 125 | 20 | 12,638 | 372 | 79,866 |
| 56 Randolph..... | 104 | 239,453 | 33,333 | 41,070 | 91,508 | 73,047 | 132 | 7 | 2,275 | 179 | 30,613 |
| 57 Russell..... | 38 | 122,449 | 22,380 | 18,870 | 60,055 | 21,144 | 53 | 8 | 2,702 | 147 | 24,118 |
| 58 St. Clair..... | 74 | 233,876 | 33,442 | 24,035 | 116,299 | 50,100 | 105 | 10 | 7,310 | 230 | 52,033 |
| 59 Shelby..... | 91 | 1,247,692 | 236,333 | 246,030 | 273,333 | 441,675 | 99 | 40 | 30,095 | 820 | 208,211 |
| 60 Sumter..... | 62 | 225,348 | 50,007 | 26,395 | 96,097 | 52,249 | 72 | 10 | 2,915 | 160 | 30,874 |
| 61 Talladega..... | 143 | 2,636,398 | 229,276 | 1,101,300 | 736,142 | 569,180 | 158 | 50 | 44,461 | 1,320 | 239,675 |
| 62 Tallapoosa..... | 133 | 300,775 | 45,901 | 33,298 | 134,568 | 82,013 | 161 | 13 | 7,477 | 275 | 71,862 |
| 63 Tuscaloosa..... | 105 | 871,794 | 67,273 | 165,141 | 510,610 | 128,740 | 105 | 28 | 29,137 | 1,037 | 198,096 |
| 64 Walker..... | 58 | 1,298,054 | 60,492 | 296,277 | 509,652 | 431,633 | 78 | 10 | 10,326 | 638 | 144,545 |
| 65 Washington..... | 34 | 532,315 | 139,333 | 63,125 | 176,614 | 148,193 | 46 | 27 | 17,940 | 505 | 118,016 |
| 66 Wilcox..... | 66 | 112,239 | 13,177 | 20,429 | 64,550 | 14,033 | 86 | 1 | 219 | 91 | 13,753 |
| 67 Winston..... | 21 | 34,605 | 12,310 | 4,045 | 16,630 | 1,620 | 33 | 2 | 1,230 | 23 | 6,010 |

TABLE 7.—MANUFACTURES BY

| | 5,602 | \$70,370,081 | \$10,021,049 | \$14,957,424 | \$24,159,595 | \$21,232,013 | 6,744 | 2,530 | \$2,168,671 | 52,902 | \$15,180,419 |
|---|-------|--------------|--------------|--------------|--------------|--------------|-------|-------|-------------|--------|--------------|
| 1 All industries..... | | | | | | | | | | | |
| 2 Awnings, tents, and sails..... | 4 | 5,150 | | | 1,850 | 3,800 | 4 | | | 9 | 6,625 |
| 3 Bicycle and tricycle repairing..... | 35 | 46,700 | 465 | 2,075 | 12,440 | 31,720 | 41 | 3 | 1,190 | 50 | 15,177 |
| 4 Blacksmithing and wheelwrighting..... | 452 | 259,062 | 39,623 | 46,649 | 60,117 | 113,373 | 543 | 3 | 615 | 409 | 101,041 |
| 5 Boots and shoes, custom work and repairing..... | 118 | 29,952 | 4,620 | 3,715 | 11,813 | 9,904 | 125 | 1 | 156 | 60 | 19,423 |
| 6 Bread and other bakery products..... | 51 | 280,755 | 49,530 | 71,000 | 73,493 | 66,732 | 54 | 55 | 29,188 | 232 | 87,392 |

BY COUNTIES: 1900.

| AVERAGE NUMBER OF WAGE-EARNERS AND TOTAL WAGES—continued. | | | | | | MISCELLANEOUS EXPENSES. | | | | | COST OF MATERIALS USED. | | | Value of products, including custom work and repairing. | |
|---|--------------|---------------------------|-----------|---------------------------|-----------|-------------------------|----------------|--|---------------------------------|----------------|-------------------------|---|----------------------------------|---|----|
| Men, 16 years and over. | | Women, 16 years and over. | | Children, under 16 years. | | Total. | Rent of works. | Taxes, not including internal revenue. | Rent of offices, interest, etc. | Contract work. | Total. | Principal materials, including mill supplies and freight. | Fuel and rent of power and heat. | | |
| Average number. | Wages. | Average number. | Wages. | Average number. | Wages. | | | | | | | | | | |
| 45,530 | \$14,073,456 | 3,898 | \$704,099 | 3,474 | \$352,864 | \$3,828,402 | \$291,181 | \$388,511 | \$2,907,994 | \$185,766 | \$46,151,026 | \$40,620,881 | \$5,530,195 | \$82,793,804 | 1 |
| 648 | 200,027 | 100 | 20,672 | 144 | 11,789 | 86,082 | 1,060 | 7,413 | 38,146 | 39,463 | 642,737 | 632,335 | 10,402 | 1,209,700 | 2 |
| 629 | 162,831 | 9 | 875 | 28 | 3,005 | 23,462 | 135 | 3,581 | 19,746 | | 438,504 | 437,596 | 908 | 821,566 | 3 |
| 370 | 70,551 | 99 | 15,201 | 131 | 11,296 | 28,547 | 232 | 7,049 | 20,766 | 500 | 294,821 | 274,923 | 19,893 | 558,975 | 4 |
| 976 | 86,379 | 3 | 700 | 19 | 3,300 | 23,189 | 1,718 | 1,336 | 20,051 | 84 | 262,551 | 250,112 | 3,439 | 456,305 | 5 |
| 135 | 43,137 | | | 4 | 441 | 2,314 | 604 | 764 | 921 | 125 | 90,027 | 87,858 | 2,169 | 264,179 | 6 |
| 187 | 33,448 | 9 | 1,728 | 21 | 1,329 | 8,988 | 90 | 1,571 | 7,277 | | 208,628 | 198,418 | 10,210 | 326,011 | 7 |
| 523 | 153,030 | 51 | 10,050 | 61 | 10,145 | 16,692 | 1,084 | 4,117 | 11,396 | 95 | 355,472 | 353,186 | 2,286 | 680,909 | 8 |
| 2,030 | 683,096 | 345 | 52,201 | 327 | 34,058 | 187,041 | 8,639 | 17,023 | 154,694 | 6,635 | 1,792,675 | 1,705,210 | 87,465 | 3,283,335 | 9 |
| 756 | 181,399 | 369 | 57,741 | 323 | 35,776 | 30,218 | 1,151 | 7,910 | 21,157 | | 1,081,431 | 1,043,926 | 37,505 | 1,853,016 | 10 |
| 192 | 41,287 | 4 | 610 | 5 | 505 | 13,405 | 915 | 2,685 | 9,805 | | 232,765 | 150,651 | 82,114 | 395,246 | 11 |
| 402 | 86,848 | | | 11 | 1,182 | 18,463 | 160 | 1,942 | 16,361 | | 177,933 | 176,933 | 1,000 | 340,948 | 12 |
| 133 | 23,518 | 2 | 186 | 3 | 179 | 2,588 | 1,025 | 472 | 971 | 120 | 42,101 | 40,823 | 1,278 | 95,097 | 13 |
| 373 | 106,721 | | | 16 | 1,890 | 14,673 | 424 | 2,739 | 11,370 | 140 | 344,735 | 341,257 | 3,478 | 606,023 | 14 |
| 261 | 48,634 | | | 2 | 144 | 5,412 | 401 | 1,455 | 3,566 | | 154,601 | 151,092 | 3,509 | 262,889 | 15 |
| 143 | 34,953 | 8 | 700 | 1 | 150 | 2,972 | 255 | 1,909 | 1,787 | 20 | 106,611 | 105,302 | 1,309 | 203,559 | 16 |
| 618 | 128,669 | 2 | 200 | 4 | 225 | 12,431 | 4,673 | 2,930 | 4,300 | 528 | 92,447 | 89,965 | 2,482 | 340,810 | 17 |
| 857 | 277,353 | 10 | 1,469 | 14 | 2,976 | 126,333 | 1,594 | 6,678 | 118,061 | | 976,229 | 953,591 | 380,638 | 1,663,848 | 18 |
| 341 | 78,107 | 1 | 100 | 2 | 150 | 4,841 | 247 | 1,829 | 2,565 | 200 | 139,978 | 138,494 | 1,484 | 363,743 | 19 |
| 169 | 24,899 | 2 | 600 | 8 | 1,004 | 2,145 | 100 | 681 | 1,164 | 200 | 72,038 | 69,950 | 2,088 | 140,593 | 20 |
| 631 | 146,172 | | | | | 7,912 | 295 | 4,252 | 2,365 | 1,000 | 226,214 | 221,337 | 1,877 | 493,363 | 21 |
| 309 | 57,800 | | | 5 | 544 | 4,896 | 163 | 1,777 | 2,826 | 130 | 113,713 | 112,008 | 1,705 | 244,666 | 22 |
| 101 | 23,593 | 1 | 150 | 1 | 115 | 3,442 | 196 | 829 | 2,417 | | 68,457 | 61,009 | 2,448 | 129,840 | 23 |
| 172 | 33,671 | 12 | 1,130 | 5 | 575 | 4,987 | 835 | 2,645 | 1,823 | 184 | 129,491 | 125,590 | 3,901 | 222,276 | 24 |
| 1,127 | 360,707 | 248 | 43,983 | 114 | 11,811 | 96,692 | 18,274 | 12,961 | 63,439 | 6,908 | 1,215,221 | 1,163,586 | 51,635 | 2,136,474 | 25 |
| 200 | 58,805 | 5 | 880 | 1 | 128 | 7,902 | 660 | 1,393 | 4,094 | 1,753 | 168,488 | 161,593 | 6,890 | 341,076 | 26 |
| 492 | 127,697 | 220 | 86,000 | 278 | 26,400 | 38,279 | 1,585 | 7,101 | 29,543 | 50 | 408,636 | 406,828 | 1,808 | 772,124 | 27 |
| 416 | 112,594 | 2 | 920 | 3 | 425 | 10,891 | 365 | 9,821 | 6,105 | | 635,315 | 634,733 | 582 | 1,129,560 | 28 |
| 991 | 268,239 | 365 | 74,718 | 69 | 7,027 | 121,123 | 2,965 | 8,482 | 114,410 | 265 | 1,182,570 | 1,023,629 | 159,041 | 1,956,139 | 29 |
| 32 | 4,741 | 1 | 90 | | | 700 | 130 | 822 | 268 | 40 | 15,666 | 15,816 | 851 | 32,707 | 30 |
| 221 | 50,514 | | | 1 | 113 | 6,312 | 865 | 1,825 | 4,822 | 300 | 64,182 | 64,561 | 6,661 | 194,603 | 31 |
| 767 | 156,288 | 4 | 850 | 7 | 450 | 30,337 | 1,314 | 2,394 | 15,150 | 11,479 | 158,588 | 156,109 | 2,479 | 499,596 | 32 |
| 45 | 6,189 | | | 1 | 90 | 1,201 | 405 | 442 | 294 | | 22,158 | 19,857 | 2,301 | 49,853 | 33 |
| 105 | 20,233 | 2 | 395 | 3 | 400 | 2,509 | 728 | 919 | 867 | | 45,619 | 40,427 | 3,193 | 104,169 | 34 |
| 643 | 131,939 | 17 | 3,677 | 34 | 3,501 | 18,124 | 2,653 | 5,283 | 10,061 | 120 | 484,806 | 474,594 | 10,212 | 871,674 | 35 |
| 313 | 73,011 | 7 | 808 | 64 | 7,316 | 9,012 | 1,010 | 1,117 | 6,885 | | 205,091 | 203,210 | 1,881 | 443,119 | 36 |
| 13,232 | 4,788,841 | 500 | 124,943 | 344 | 46,558 | 1,442,233 | 98,981 | 110,272 | 1,163,163 | 70,767 | 15,469,793 | 11,730,561 | 3,733,232 | 27,629,366 | 37 |
| 125 | 28,936 | | | 3 | 286 | 1,581 | 812 | 663 | 551 | 5 | 66,813 | 65,507 | 1,306 | 144,713 | 38 |
| 742 | 204,850 | 119 | 15,799 | 169 | 17,617 | 60,796 | 1,904 | 8,252 | 50,640 | | 970,112 | 854,312 | 115,800 | 1,465,568 | 39 |
| 78 | 12,271 | | | 1 | 60 | 1,562 | 435 | 585 | 532 | | 37,977 | 36,157 | 1,820 | 79,198 | 40 |
| 312 | 68,256 | 8 | 565 | 3 | 260 | 18,147 | 3,248 | 3,968 | 10,808 | 30 | 269,839 | 260,799 | 9,040 | 472,709 | 41 |
| 128 | 24,997 | 5 | 1,510 | 2 | 166 | 4,080 | 1,860 | 907 | 1,313 | | 126,052 | 124,191 | 1,861 | 237,957 | 42 |
| 88 | 12,939 | 1 | 90 | 1 | 88 | 2,136 | 908 | 755 | 425 | 50 | 17,273 | 13,130 | 4,143 | 67,597 | 43 |
| 82 | 16,359 | 4 | 1,095 | 1 | 90 | 4,652 | 1,431 | 791 | 2,430 | | 57,696 | 54,224 | 3,472 | 109,450 | 44 |
| 960 | 272,651 | 282 | 53,673 | 248 | 18,474 | 180,669 | 7,730 | 12,536 | 137,431 | 2,972 | 1,272,835 | 1,240,314 | 32,521 | 2,274,262 | 45 |
| 384 | 71,657 | 8 | 1,775 | 30 | 3,678 | 25,289 | 1,994 | 2,941 | 18,354 | 2,000 | 192,993 | 182,577 | 10,421 | 416,703 | 46 |
| 34 | 5,423 | | | 2 | 217 | 916 | 86 | 466 | 414 | | 30,545 | 30,285 | 260 | 56,300 | 47 |
| 152 | 28,303 | 7 | 563 | 26 | 1,777 | 4,719 | 563 | 780 | 2,996 | 380 | 65,871 | 64,002 | 1,869 | 163,215 | 48 |
| 4,556 | 1,709,628 | 104 | 22,454 | 102 | 12,033 | 337,119 | 62,257 | 31,466 | 262,006 | 31,930 | 3,201,302 | 3,131,102 | 70,200 | 7,019,670 | 49 |
| 464 | 97,593 | 3 | 540 | 9 | 915 | 5,603 | 1,055 | 2,098 | 2,275 | 175 | 179,792 | 178,278 | 1,484 | 412,974 | 50 |
| 2,007 | 740,645 | 364 | 75,222 | 147 | 16,164 | 346,793 | 36,611 | 29,268 | 279,351 | 1,563 | 2,939,599 | 2,864,982 | 74,617 | 5,155,596 | 51 |
| 1,774 | 769,922 | 9 | 2,707 | 15 | 1,260 | 91,285 | 3,031 | 8,053 | 79,294 | 907 | 3,897,931 | 3,856,476 | 41,455 | 5,236,921 | 52 |
| 110 | 21,947 | 1 | 300 | 4 | 375 | 4,002 | 951 | 1,630 | 1,491 | 30 | 124,855 | 119,226 | 5,629 | 233,478 | 53 |
| 87 | 12,994 | 1 | 150 | 1 | 60 | 1,961 | 394 | 747 | 820 | | 41,484 | 39,839 | 1,645 | 87,402 | 54 |
| 348 | 75,689 | 20 | 3,895 | 4 | 232 | 24,488 | 1,311 | 4,053 | 18,924 | 200 | 285,642 | 276,048 | 9,594 | 531,106 | 55 |
| 123 | 28,897 | 27 | 4,000 | 29 | 3,216 | 7,799 | 1,522 | 1,685 | 4,467 | 175 | 246,416 | 240,936 | 5,480 | 357,987 | 56 |
| 138 | 23,133 | | | 9 | 975 | 11,305 | 1,407 | 1,045 | 8,853 | | 121,268 | 115,157 | 6,111 | 231,865 | 57 |
| 218 | 50,843 | | | 12 | 1,240 | 4,539 | 482 | 845 | 3,142 | 120 | 190,423 | 188,507 | 1,916 | 348,824 | 58 |
| 795 | 205,094 | 9 | 1,155 | 16 | 1,962 | 38,019 | 2,621 | 8,470 | 26,797 | 231 | 613,736 | 599,452 | 154,284 | 1,122,239 | 59 |
| 155 | 30,234 | | | 6 | 640 | 5,746 | 508 | 1,262 | 972 | 3,004 | 78,614 | 74,709 | 3,905 | 174,726 | 60 |
| 885 | 199,889 | 180 | 21,752 | 255 | 18,034 | 54,420 | 2,839 | 9,291 | 42,105 | 135 | 1,185,639 | 839,627 | 206,012 | 1,968,041 | 61 |
| 263 | 69,894 | 3 | 617 | 9 | 1,351 | 14,783 | 1,273 | 2,043 | 11,377 | 90 | 310,662 | 303,438 | 7,224 | 459,465 | 62 |
| 656 | 165,234 | 233 | 24,336 | 118 | 3,026 | 40,222 | 3,176 | 4,944 | 31,602 | 500 | 777,787 | 759,994 | 17,793 | 1,210,172 | 63 |
| 363 | 108,133 | 115 | 20,091 | 160 | 16,271 | 68,318 | 805 | 1,060 | 66,453 | | 473,849 | 468,313 | 5,536 | 876,180 | 64 |
| 465 | 115,436 | 12 | 1,000 | 28 | 2,180 | 11,348 | 95 | 2,514 | 8,298 | 441 | 310,611 | 300,627 | 1,034 | 614,368 | 65 |
| 88 | 13,518 | | | 3 | 240 | 2,739 | 229 | 769 | 1,591 | 150 | 34,591 | 31,538 | 3,053 | 87,077 | 66 |
| 28 | 6,010 | | | | | 463 | 5 | 343 | 105 | | 24,487 | 24,140 | 347 | 51,888 | 67 |

SPECIFIED INDUSTRIES: 1900.

| 45,530 | \$14,073,456 | 3,898 | \$704,099 | 3,474 | \$352,864 | \$3,828,402 | \$291,181 | \$388,511 | \$2,907,994 | \$185,766 | \$46,151,026 | \$40,620,881 | \$5,530,195 | \$82,793,804 | 1 |
|--------|--------------|-------|-----------|-------|-----------|-------------|-----------|-----------|-------------|-----------|--------------|--------------|-------------|--------------|---|
| 9 | 6,625 | | | | | 607 | 3 | | | | | | | | |

TABLE 7.—MANUFACTURES BY

| MANUFACTURING AND MECHANICAL INDUSTRIES. | Number of establishments. | CAPITAL. | | | | | Proprietors and firm members. | SALARIED OFFICIALS, CLERKS, ETC. | | AVERAGE NUMBER OF WAGE-EARNERS AND TOTAL WAGES. | |
|--|---------------------------|------------|-----------|------------|-----------------------------------|--------------------|-------------------------------|----------------------------------|-----------|---|-----------|
| | | Total. | Land. | Buildings. | Machinery, tools, and implements. | Cash and sundries. | | Number. | Salaries. | Total. | |
| | | | | | | | | | | Average number. | Wages. |
| 7 Brick and tile | 72 | \$431,749 | \$37,165 | \$123,025 | \$107,601 | \$168,958 | 93 | 44 | \$24,719 | 1,122 | \$256,708 |
| 8 Brooms and brushes | 10 | 15,480 | 2,600 | 1,850 | 2,175 | 9,855 | 10 | 4 | 1,850 | 44 | 10,791 |
| 9 Carpentry | 73 | 163,625 | 12,585 | 17,885 | 87,250 | 96,455 | 82 | 17 | 12,395 | 742 | 250,675 |
| 10 Carriage and wagon materials | 6 | 54,974 | 2,975 | 4,375 | 20,937 | 27,287 | 8 | 5 | 3,400 | 60 | 18,180 |
| 11 Carriages and wagons | 49 | 386,061 | 15,540 | 39,670 | 32,237 | 298,557 | 58 | 24 | 15,985 | 408 | 128,647 |
| 12 Cars and general shop construction and repairs by steam railroad companies. | 19 | 2,019,494 | 169,200 | 559,810 | 660,570 | 629,854 | ----- | 118 | 112,795 | 4,080 | 1,941,031 |
| 13 Charcoal | 51 | 77,426 | 18,375 | 1,824 | 6,880 | 55,847 | 56 | 3 | 2,820 | 467 | 88,042 |
| 14 Cheese, butter, and condensed milk, factory product. | 4 | 18,670 | 700 | 3,600 | 7,870 | 2,000 | 4 | ----- | ----- | 4 | 1,277 |
| 15 Clothing, men's, custom work and repairing. | 54 | 156,565 | 1,100 | 3,200 | 11,140 | 141,125 | 65 | 9 | 7,430 | 234 | 99,204 |
| 16 Clothing, men's, factory product. | 7 | 96,004 | ----- | ----- | 16,189 | 79,815 | 9 | 13 | 11,060 | 191 | 46,546 |
| 17 Clothing, women's, dressmaking | 19 | 7,305 | 500 | 500 | 3,055 | 3,250 | 20 | 1 | 1,200 | 106 | 22,223 |
| 18 Coke | 15 | 3,855,379 | 1,808,111 | 78,751 | 2,217,140 | 256,877 | 2 | 43 | 40,003 | 1,592 | 585,622 |
| 19 Confectionery | 19 | 124,537 | 2,500 | 1,075 | 27,835 | 98,127 | 23 | 36 | 14,485 | 145 | 22,292 |
| 20 Cooperage | 9 | 34,470 | 805 | 1,050 | 20,515 | 12,100 | 8 | 3 | 1,760 | 89 | 26,880 |
| 21 Cordage and twine | 4 | 298,448 | 27,025 | 45,951 | 169,976 | 55,495 | ----- | 10 | 10,980 | 282 | 47,648 |
| 22 Cotton, compressing | 11 | 472,671 | 60,400 | 103,000 | 194,000 | 115,271 | 1 | 41 | 31,136 | 257 | 51,040 |
| 23 Cotton, ginning ¹ | 1,216 | 2,006,406 | 77,867 | 396,298 | 1,444,813 | 87,428 | 1,581 | 102 | 11,249 | 1,518 | 194,133 |
| 24 Cotton goods | 31 | 11,638,767 | 827,152 | 2,364,941 | 5,198,990 | 3,747,624 | ----- | 150 | 197,700 | 8,332 | 1,482,226 |
| 25 Druggists' preparations, not including prescriptions. | 7 | 13,650 | 100 | 500 | 4,175 | 8,875 | 6 | 20 | 9,386 | 7 | 1,174 |
| 26 Dyeing and cleaning | 16 | 15,305 | 2,540 | 2,500 | 4,895 | 5,460 | 17 | 5 | 2,856 | 41 | 12,454 |
| 27 Electrical construction and repairs | 6 | 26,700 | ----- | ----- | 5,850 | 20,850 | 5 | 7 | 4,150 | 44 | 19,485 |
| 28 Fertilizers | 17 | 1,407,323 | 18,118 | 225,500 | 175,518 | 988,187 | 32 | 60 | 61,975 | 439 | 94,665 |
| 29 Flouring and grist mill products | 781 | 1,047,961 | 118,425 | 240,400 | 494,533 | 194,603 | 934 | 39 | 22,691 | 540 | 92,858 |
| 30 Foundry and machine shop products | 74 | 4,826,825 | 844,620 | 673,592 | 1,590,744 | 2,217,969 | 60 | 281 | 251,363 | 3,461 | 1,329,566 |
| 31 Fruits and vegetables, canning and preserving. | 3 | 7,585 | 4,110 | 1,125 | 850 | 1,500 | 3 | 1 | 800 | 16 | 2,880 |
| 32 Furniture, cabinetmaking, repairing, and upholstering. | 19 | 14,565 | 1,320 | 1,075 | 4,200 | 7,970 | 24 | ----- | ----- | 18 | 8,670 |
| 33 Furniture, factory product. | 5 | 75,519 | 3,025 | 9,625 | 16,400 | 45,569 | 7 | 3 | 2,760 | 123 | 85,025 |
| 34 Gas, illuminating and heating | 11 | 1,120,539 | 47,800 | 145,520 | 830,996 | 96,723 | ----- | 40 | 80,674 | 75 | 81,611 |
| 35 Ice, artificial | 21 | 611,367 | 61,700 | 77,700 | 422,600 | 49,867 | 11 | 41 | 33,280 | 160 | 58,106 |
| 36 Iron and steel | 25 | 15,913,479 | 902,188 | 7,161,378 | 2,724,947 | 5,124,966 | ----- | 182 | 292,861 | 7,238 | 2,454,461 |
| 37 Leather, tanned, curried, and finished | 18 | 464,005 | 7,955 | 38,935 | 149,575 | 267,540 | 19 | 8 | 7,200 | 165 | 71,440 |
| 38 Lime and cement | 17 | 366,647 | 91,975 | 86,545 | 157,270 | 80,754 | 17 | 20 | 10,645 | 396 | 89,987 |
| 39 Liquors, distilled | 15 | 33,650 | 3,970 | 6,425 | 20,475 | 2,780 | 16 | 1 | 1,200 | 15 | 5,080 |
| 40 Liquors, malt | 5 | 829,446 | 52,000 | 284,000 | 335,000 | 158,446 | ----- | 34 | 40,142 | 239 | 75,157 |
| 41 Lock and gun smithing | 14 | 22,665 | 1,850 | 3,650 | 5,500 | 11,665 | 13 | 1 | 1,800 | 17 | 9,230 |
| 42 Looking-glass and picture frames | 12 | 11,470 | 400 | 700 | 1,845 | 8,525 | 15 | 3 | 540 | 8 | 8,775 |
| 43 Lumber and timber products | 1,111 | 13,020,483 | 5,156,012 | 874,989 | 4,338,919 | 2,650,263 | 1,616 | 399 | 310,572 | 9,273 | 2,265,018 |
| 44 Lumber, planing mill products, including sash, doors, and blinds. | 50 | 345,372 | 25,900 | 36,700 | 138,009 | 145,263 | 58 | 33 | 25,390 | 432 | 140,669 |
| 45 Marble and stone work | 8 | 343,122 | 59,933 | 24,540 | 92,065 | 170,634 | 4 | 27 | 30,230 | 305 | 96,381 |
| 46 Masonry, brick and stone | 14 | 295,894 | ----- | 50 | 32,445 | 263,399 | 23 | 24 | 11,800 | 481 | 198,187 |
| 47 Mattresses and spring beds | 6 | 50,089 | ----- | 40 | 8,672 | 41,377 | 5 | 12 | 5,840 | 36 | 14,040 |
| 48 Millinery, custom work | 110 | 233,112 | 11,100 | 20,080 | 5,614 | 196,318 | 143 | 41 | 22,366 | 246 | 78,174 |
| 49 Mineral and soda waters | 20 | 75,975 | 2,850 | 3,050 | 38,650 | 31,425 | 23 | 9 | 6,940 | 79 | 28,480 |
| 50 Monuments and tombstones | 21 | 43,892 | 3,332 | 5,430 | 2,805 | 32,235 | 20 | 2 | 1,260 | 54 | 20,153 |
| 51 Oil, cottonseed and cake | 23 | 1,609,674 | 106,489 | 333,822 | 782,762 | 836,601 | 21 | 106 | 99,020 | 759 | 196,700 |
| 52 Painting, house, sign, etc | 16 | 22,055 | 2,410 | 2,875 | 2,135 | 14,635 | 18 | 3 | 1,400 | 57 | 19,874 |
| 53 Patent medicines and compounds | 6 | 15,145 | ----- | ----- | 2,195 | 12,950 | 7 | 13 | 6,815 | 19 | 6,668 |
| 54 Photography | 46 | 62,329 | 2,905 | 8,125 | 32,905 | 18,394 | 47 | 2 | 792 | 46 | 18,306 |
| 55 Plumbing, and gas and steam fitting | 47 | 137,520 | 3,000 | 2,800 | 10,725 | 121,295 | 53 | 21 | 13,820 | 270 | 111,274 |
| 56 Pottery, terra cotta, and fire-clay products. | 21 | 199,585 | 30,710 | 63,748 | 41,350 | 63,777 | 28 | 15 | 8,450 | 227 | 66,667 |
| 57 Printing and publishing, book and job. | 40 | 224,974 | 1,350 | 1,550 | 151,371 | 70,703 | 54 | 16 | 16,944 | 256 | 100,774 |
| 58 Printing and publishing, newspapers and periodicals. | 156 | 621,852 | 13,945 | 37,580 | 362,741 | 207,586 | 173 | 80 | 79,809 | 543 | 241,525 |
| 59 Rice, cleaning and polishing | 4 | 2,995 | 95 | 400 | 2,100 | 400 | 5 | 3 | ----- | 3 | 860 |
| 60 Roofing and roofing materials | 8 | 43,791 | 4,200 | 6,500 | 15,498 | 17,596 | 8 | 3 | 1,180 | 85 | 35,300 |
| 61 Saddlery and harness | 37 | 67,565 | 850 | 3,450 | 10,151 | 53,114 | 42 | 7 | 4,084 | 35 | 13,109 |
| 62 Sewing machine repairing | 6 | 4,170 | 500 | 1,000 | 970 | 1,700 | 6 | 1 | 125 | 2 | 1,000 |
| 63 Ship and boat building, wooden | 6 | 140,946 | 24,750 | 2,000 | 31,820 | 87,776 | 4 | 3 | 4,300 | 293 | 101,526 |
| 64 Sugar and molasses, refining | 59 | 4,402 | 202 | 294 | 3,833 | 73 | 66 | ----- | ----- | 24 | 3,655 |
| 65 Smithing, copper-smithing, and sheet-iron working. | 37 | 183,781 | 18,800 | 21,779 | 24,630 | 118,572 | 41 | 12 | 14,710 | 150 | 59,795 |
| 66 Tobacco, cigars and cigarettes | 26 | 116,145 | 4,005 | 6,775 | 3,424 | 101,941 | 29 | 18 | 13,530 | 186 | 88,395 |
| 67 Trunks and valises | 3 | 2,850 | ----- | ----- | 700 | 2,150 | 4 | ----- | ----- | 14 | 4,500 |
| 68 Turpentine and rosin | 152 | 1,170,391 | 525,973 | 111,920 | 161,773 | 376,718 | 236 | 162 | 67,062 | 3,716 | 780,573 |
| 69 Typewriter repairing | 3 | 385 | ----- | ----- | 100 | 285 | 3 | ----- | ----- | 3 | 950 |
| 70 Vinegar and cider | 3 | 4,951 | ----- | ----- | 1,075 | 3,876 | 4 | 2 | 1,500 | 5 | 1,860 |
| 71 Watch, clock, and jewelry repairing | 92 | 76,026 | 4,250 | 6,560 | 28,126 | 37,090 | 103 | 1 | 300 | 57 | 37,357 |
| 72 Wood, turned and carved | 8 | 78,570 | 9,000 | 15,150 | 23,050 | 31,370 | 7 | 17 | 12,145 | 234 | 60,570 |
| 73 Woolen goods | 11 | 97,759 | 2,175 | 14,795 | 31,723 | 49,066 | 13 | 2 | 1,820 | 75 | 10,458 |
| 74 All other industries ² | 52 | 1,793,594 | 195,775 | 472,449 | 493,550 | 631,820 | 40 | 109 | 101,578 | 1,502 | 504,039 |

¹ Does not include many ginneries operated in connection with saw, grist, and cottonseed oil mills, or for the use exclusively of plantations on which they are located. For the full number of ginneries in operation, reference should be made to the special report on cotton ginning.

² Embodies agricultural implements, 1; baking and yeast powders, 2; baskets, and rattan and willow ware, 1; bookbinding and blank book making, 1; boot and shoe uppers, 1; boots and shoes, factory product, 1; bottling, 1; boxes, cigar, 1; boxes, wooden packing, 1; brass castings and brass finishing, 2; bridges, 1; bronze castings, 1; carpets and rugs, other than rag, 1; cars and general shop construction and repairs by street railroad companies, 1; cars, steam railroad, not including operations of railroad companies, 2; coffins, burial cases, and undertakers' goods, 1; dyeing and finishing textiles, 1; explosives, 2; foundry supplies, 2; furnishing

SPECIFIED INDUSTRIES: 1900—Continued.

| AVERAGE NUMBER OF WAGE-EARNERS AND TOTAL WAGES—continued. | | | | | | MISCELLANEOUS EXPENSES. | | | | | COST OF MATERIALS USED. | | | Value of products, including custom work and repairing. | |
|---|-----------|---------------------------|---------|---------------------------|----------|-------------------------|----------------|--|---------------------------------|----------------|-------------------------|---|----------------------------------|---|----|
| Men, 16 years and over. | | Women, 16 years and over. | | Children, under 16 years. | | Total. | Rent of works. | Taxes, not including internal revenue. | Rent of offices, interest, etc. | Contract work. | Total. | Principal materials, including mill supplies and freight. | Fuel and rent of power and heat. | | |
| Average number. | Wages. | Average number. | Wages. | Average number. | Wages. | | | | | | | | | | |
| 992 | \$239,852 | | | 130 | \$16,851 | \$38,046 | \$6,464 | \$2,718 | \$10,844 | \$18,025 | \$142,982 | \$32,483 | \$110,449 | \$657,794 | 7 |
| 36 | 10,076 | 1 | \$150 | 7 | 565 | 1,404 | 1,000 | 165 | 229 | 19 | 26,406 | 26,899 | 7 | 67,270 | 8 |
| 741 | 250,615 | | | 1 | 60 | 28,246 | 2,778 | 1,412 | 4,781 | 19,325 | 455,078 | 453,984 | 1,094 | 939,142 | 9 |
| 60 | 13,180 | | | | | 1,566 | | 85 | 1,581 | 200 | 29,188 | 24,035 | 1,148 | 55,326 | 10 |
| 394 | 126,609 | | | 14 | 2,088 | 40,928 | 6,500 | 2,876 | 81,177 | 376 | 230,397 | 226,186 | 4,211 | 556,327 | 11 |
| 4,019 | 1,939,170 | 11 | 1,861 | | | 86,045 | | 12,276 | 78,769 | | 2,082,166 | 1,998,788 | 35,428 | 4,172,192 | 12 |
| 467 | 83,042 | | | | | 3,294 | 1,080 | 108 | 1,271 | 885 | 27,838 | 27,838 | | 132,376 | 13 |
| 8 | 1,217 | 1 | 60 | | | 175 | | 108 | 67 | | 8,084 | 7,418 | 616 | 12,969 | 14 |
| 168 | 80,232 | 68 | 18,780 | 8 | 192 | 22,450 | 15,327 | 1,968 | 4,865 | 290 | 171,181 | 169,448 | 1,688 | 404,213 | 15 |
| 16 | 6,265 | 165 | 39,281 | 10 | 1,000 | 5,593 | 3,332 | 589 | 1,672 | | 152,424 | 151,371 | 1,053 | 262,454 | 16 |
| | | 106 | 22,223 | | | 2,891 | 2,127 | 85 | 679 | | 14,918 | 14,691 | 227 | 66,485 | 17 |
| 1,558 | 527,737 | | | 34 | 7,865 | 180,290 | 16,764 | 16,764 | 180,854 | 32,672 | 2,678,568 | 2,667,328 | 6,240 | 3,726,438 | 18 |
| 82 | 16,864 | 33 | 3,676 | 30 | 1,752 | 17,811 | 8,278 | 1,182 | 7,851 | | 137,264 | 133,988 | 3,276 | 255,486 | 19 |
| 89 | 26,330 | | | | | 6,681 | 1,155 | 376 | 6,400 | 50 | 16,155 | 15,816 | 240 | 69,000 | 20 |
| 89 | 25,771 | 105 | 13,525 | 88 | 8,347 | 14,654 | 775 | 1,749 | 12,130 | | 166,146 | 160,688 | 5,458 | 253,560 | 21 |
| 252 | 50,640 | | | 5 | 400 | 27,526 | 1,026 | 6,586 | 19,914 | | 2,123,064 | 2,115,340 | 7,724 | 2,316,248 | 22 |
| 1,509 | 193,658 | | | 9 | 475 | 42,560 | 5,231 | 17,430 | 19,829 | 70 | 291,729 | 220,094 | 71,635 | 1,218,283 | 23 |
| 8,152 | 789,225 | 2,743 | 468,244 | 2,437 | 229,757 | 511,296 | 42,809 | 468,487 | 468,994 | | 4,825,981 | 4,683,994 | 141,987 | 8,163,136 | 24 |
| 7 | 1,174 | | | | | 3,635 | 2,900 | 457 | 278 | | 3,780 | 3,687 | 93 | 81,505 | 25 |
| 31 | 11,032 | 8 | 1,292 | 2 | 180 | 5,080 | 3,242 | 271 | 1,667 | | 8,284 | 7,472 | 812 | 46,875 | 26 |
| 41 | 19,220 | | | 8 | 265 | 7,900 | 3,695 | 275 | 2,930 | 1,000 | 71,695 | 70,740 | 955 | 113,692 | 27 |
| 489 | 94,905 | | | | | 92,704 | 900 | 22,924 | 68,880 | | 1,387,385 | 1,366,831 | 20,554 | 2,068,162 | 28 |
| 589 | 92,708 | | | 1 | 150 | 84,654 | 9,783 | 9,162 | 14,765 | 944 | 2,787,631 | 2,759,436 | 28,198 | 3,810,757 | 29 |
| 3,427 | 1,823,471 | 84 | 6,995 | 84 | 6,995 | 288,553 | 13,356 | 22,178 | 218,160 | 44,859 | 2,765,921 | 2,614,886 | 141,555 | 5,482,441 | 30 |
| 9 | 1,760 | 4 | 400 | 3 | 220 | 135 | | 45 | 60 | 30 | 3,418 | 3,295 | 123 | 7,947 | 31 |
| 18 | 8,670 | | | | | 2,246 | 1,670 | 184 | 292 | 100 | 9,551 | 9,099 | 482 | 82,264 | 32 |
| 114 | 34,825 | | | 9 | 1,100 | 3,790 | 25 | 481 | 3,834 | | 46,142 | 45,182 | 960 | 107,185 | 33 |
| 75 | 31,611 | | | | | 54,396 | | 11,939 | 42,457 | | 51,010 | 49,239 | 1,777 | 282,902 | 34 |
| 160 | 53,106 | | | | | 81,352 | 3,789 | 4,239 | 23,314 | | 50,554 | 28,669 | 26,885 | 242,111 | 35 |
| 7,201 | 2,449,705 | 37 | 4,696 | | | 896,126 | 1,075 | 68,344 | 826,707 | | 10,062,094 | 5,421,083 | 4,641,011 | 17,392,483 | 36 |
| 165 | 71,440 | | | | | 44,107 | | 1,865 | 42,107 | 75 | 672,017 | 658,959 | 13,058 | 1,005,959 | 37 |
| 345 | 88,641 | 6 | 685 | 5 | 651 | 9,214 | 2,915 | 788 | 5,535 | 581 | 58,217 | 58,736 | 19,481 | 230,664 | 38 |
| 15 | 5,080 | | | | | 116,090 | 40 | 107 | 115,783 | 160 | 25,262 | 22,862 | 2,400 | 152,758 | 39 |
| 214 | 73,657 | 5 | 1,500 | | | 150,039 | | 6,342 | 143,697 | | 194,653 | 110,927 | 28,723 | 431,640 | 40 |
| 17 | 9,230 | | | | | 2,533 | 1,727 | 82 | 724 | | 3,973 | 3,782 | 191 | 24,450 | 41 |
| 8 | 3,775 | | | | | 2,527 | 2,155 | 98 | 274 | | 12,151 | 12,122 | 29 | 28,128 | 42 |
| 8,831 | 2,206,997 | 67 | 11,757 | 355 | 46,264 | 277,621 | 21,921 | 59,093 | 196,507 | | 6,646,124 | 6,644,907 | 1,217 | 12,867,551 | 43 |
| 423 | 139,341 | 3 | 700 | 6 | 618 | 15,080 | 3,960 | 2,402 | 3,673 | 645 | 482,649 | 446,643 | 6,006 | 763,123 | 44 |
| 304 | 96,218 | | | 1 | 118 | 10,164 | 1,925 | 1,155 | 7,384 | | 69,792 | 63,225 | 6,567 | 257,025 | 45 |
| 474 | 192,682 | | | 7 | 505 | 18,134 | 505 | 874 | 3,105 | 13,650 | 447,979 | 447,929 | 50 | 771,489 | 46 |
| 25 | 10,500 | 11 | 3,540 | | | 4,674 | 2,644 | 306 | 1,724 | | 72,897 | 72,332 | 565 | 109,440 | 47 |
| 10 | 4,864 | 234 | 68,005 | 2 | 205 | 31,333 | 18,688 | 1,744 | 10,826 | 75 | 290,962 | 290,091 | 871 | 539,878 | 48 |
| 76 | 28,240 | | | 3 | 250 | 12,516 | 3,583 | 2,809 | 6,034 | 75 | 42,440 | 41,201 | 1,149 | 94,069 | 49 |
| 54 | 20,153 | | | | | 1,970 | 1,946 | 206 | 658 | 70 | 47,907 | 47,822 | 85 | 148,265 | 50 |
| 757 | 196,261 | 2 | 489 | | | 194,450 | 1,250 | 15,477 | 171,705 | 6,018 | 2,103,768 | 2,038,122 | 70,646 | 2,985,390 | 51 |
| 57 | 19,874 | | | | | 1,228 | 978 | 115 | 135 | | 21,856 | 21,813 | 48 | 59,890 | 52 |
| 11 | 5,840 | 6 | 798 | 2 | 125 | 8,614 | 1,187 | 117 | 7,810 | | 26,651 | 26,599 | 52 | 58,400 | 53 |
| 32 | 14,386 | 13 | 3,779 | 1 | 144 | 12,950 | 7,593 | 767 | 4,285 | 400 | 37,619 | 37,333 | 286 | 124,492 | 54 |
| 268 | 111,057 | | | 2 | 217 | 15,803 | 9,014 | 2,220 | 4,569 | | 230,410 | 229,125 | 1,285 | 480,917 | 55 |
| 209 | 61,166 | | | 18 | 2,501 | 4,812 | 770 | 387 | 3,105 | 50 | 69,523 | 31,035 | 28,488 | 225,335 | 56 |
| 215 | 90,949 | 32 | 9,100 | 9 | 725 | 17,298 | 9,473 | 1,743 | 6,039 | 43 | 114,576 | 110,446 | 4,180 | 318,767 | 57 |
| 459 | 229,549 | 21 | 5,368 | 63 | 6,608 | 34,881 | 16,498 | 4,313 | 51,237 | 12,833 | 158,677 | 149,042 | 9,635 | 841,036 | 58 |
| 3 | 360 | | | | | 29 | | 6 | 23 | | 3,615 | 3,515 | 100 | 4,816 | 59 |
| 85 | 36,390 | | | | | 2,663 | 1,815 | 765 | 583 | | 177,740 | 177,324 | 416 | 255,240 | 60 |
| 32 | 12,821 | | | 3 | 285 | 6,856 | 4,097 | 602 | 2,157 | | 63,102 | 62,746 | 356 | 101,000 | 61 |
| 2 | 1,000 | | | | | 859 | 688 | 92 | 79 | | 2,745 | 2,720 | 25 | 6,678 | 62 |
| 293 | 101,526 | | | | | 6,022 | 2,350 | 1,638 | 2,134 | | 76,767 | 76,482 | 285 | 240,242 | 63 |
| 22 | 3,530 | | | 2 | 125 | 91 | 3 | 38 | 50 | | 32,801 | 30,141 | 2,660 | 44,745 | 64 |
| 142 | 58,372 | 2 | 400 | 6 | 523 | 13,602 | 3,622 | 1,448 | 6,532 | 2,000 | 230,843 | 228,888 | 1,955 | 421,419 | 65 |
| 171 | 86,669 | 5 | 1,030 | 10 | 696 | 36,049 | 7,180 | 1,087 | 27,882 | | 94,227 | 94,132 | 95 | 278,014 | 66 |
| 14 | 4,500 | | | | | 1,564 | 1,358 | 41 | 165 | | 6,925 | 6,855 | 70 | 22,950 | 67 |
| 3,643 | 778,717 | 29 | 2,877 | 44 | 3,979 | 59,214 | 8,015 | 8,157 | 24,616 | 18,426 | 650,681 | 639,169 | 11,512 | 2,033,705 | 68 |
| 2 | 900 | | | 1 | 50 | 520 | 240 | 30 | 250 | | 580 | 570 | 10 | 2,550 | 69 |
| 5 | 1,860 | | | | | 2,297 | 700 | 72 | 1,525 | | 11,570 | 11,570 | | 26,175 | 70 |
| 56 | 37,267 | | | 1 | 100 | 14,755 | 11,344 | 1,162 | 2,249 | | 25,927 | 25,455 | 492 | 135,513 | 71 |
| 228 | 59,809 | 1 | 133 | 5 | 628 | 2,176 | 135 | 323 | 1,718 | | 64,119 | 64,119 | 600 | 173,484 | 72 |
| 21 | 3,863 | 51 | 6,395 | 8 | 200 | 8,091 | 113 | 231 | 7,647 | 100 | 43,078 | 42,133 | 940 | 67,293 | 73 |
| 1,325 | 484,399 | 181 | 16,590 | 46 | 3,050 | 108,351 | 9,020 | 5,458 | 88,346 | 5,527 | 1,564,269 | 1,525,405 | 38,864 | 2,580,413 | 74 |

goods, men's, 1; glass, cutting, staining, and ornamenting, 1; hairwork, 1; hand stamps, 1; hosiery and knit goods, 1; house furnishing goods, not elsewhere specified, 1; ironwork, architectural and ornamental, 1; krollin and other earth grinding, 1; liquors, various, 2; optical goods, 2; oysters, canning and preserving, 1; paper hanging, 2; paving and paving materials, 2; plastering and stuccowork, 1; pumps, not including steam pumps, 1; shirts, 1; slaughtering and meat packing, wholesale, 1; slaughtering, wholesale, not including meat packing, 1; soda water apparatus, 1; tobacco, chewing, smoking, and snuff, 1; upholstering materials, 1; washing machines and clothes wringers, 1; woodenware, not elsewhere specified, 2.

TABLE 8.—MANUFACTURES IN CITIES.

BIRMINGHAM.

| MANUFACTURING AND MECHANICAL INDUSTRIES. | Number of establishments. | CAPITAL. | | | | | Proprietors and firm members. | SALARIED OFFICIALS, CLERKS, ETC. | | AVERAGE NUMBER OF WAGE-EARNERS AND TOTAL WAGES. | |
|--|---------------------------|-------------|-----------|-------------|-----------------------------------|--------------------|-------------------------------|----------------------------------|-----------|---|-------------|
| | | Total. | Land. | Buildings. | Machinery, tools, and implements. | Cash and sundries. | | Number. | Salaries. | Total. | |
| | | | | | | | | | | Average number. | Wages. |
| 1 All industries | 283 | \$7,434,054 | \$579,430 | \$1,627,434 | \$2,466,453 | \$2,861,337 | 284 | 359 | \$405,424 | 6,076 | \$2,587,221 |
| 2 Bicycle and tricycle repairing | 6 | 19,650 | | | 4,000 | 15,650 | 7 | | | 16 | 6,590 |
| 3 Blacksmithing and wheelwrighting | 18 | 6,320 | | | 2,310 | 4,010 | 23 | | | 35 | 14,599 |
| 4 Boots and shoes, custom work and repairing | 31 | 6,175 | | | 2,475 | 3,700 | 34 | | | 29 | 10,490 |
| 5 Bread and other bakery products | 8 | 67,155 | 8,000 | 9,000 | 25,700 | 24,455 | 7 | 27 | 16,760 | 87 | 26,552 |
| 6 Brick and tile | 3 | 16,650 | | 3,000 | 2,150 | 11,500 | 4 | | | 75 | 20,791 |
| 7 Carpentering | 13 | 13,500 | | | 2,050 | 11,450 | 15 | 1 | 3,600 | 115 | 59,550 |
| 8 Carriages and wagons | 6 | 22,900 | | 400 | 9,400 | 13,100 | 7 | | | 54 | 22,700 |
| 9 Cars and general shop construction and repairs by steam railroad companies | 3 | 403,653 | 70,000 | 90,300 | 85,700 | 157,653 | | 22 | 18,862 | 1,195 | 609,411 |
| 10 Clothing, men's, custom work and repairing | 12 | 64,750 | | | 3,100 | 61,650 | 18 | 1 | 1,000 | 80 | 42,432 |
| 11 Clothing, women's, dressmaking | 7 | 2,925 | | | 1,825 | 1,100 | 7 | 1 | 1,200 | 64 | 15,823 |
| 12 Confectionery | 4 | 5,700 | | | 2,000 | 3,700 | 4 | 2 | 1,020 | 10 | 3,440 |
| 13 Dyeing and cleaning | 7 | 2,865 | | | 1,600 | 1,265 | 7 | 1 | 720 | 18 | 4,735 |
| 14 Electrical construction and repairs | 3 | 21,450 | | | 4,050 | 17,400 | 2 | 6 | 3,970 | 36 | 16,655 |
| 15 Flouring and grist mill products | 3 | 46,250 | 1,000 | 2,000 | 16,500 | 26,750 | 1 | 7 | 7,420 | 14 | 4,530 |
| 16 Foundry and machine shop products | 16 | 1,314,620 | 79,000 | 110,228 | 310,131 | 815,201 | 11 | 65 | 82,449 | 873 | 339,366 |
| 17 Furniture, cabinetmaking, repairing, and upholstering | 4 | 1,550 | | | 625 | 925 | 3 | | | 5 | 2,050 |
| 18 Iron and steel | 4 | 2,602,291 | 160,000 | 886,000 | 552,658 | 1,003,633 | | 37 | 77,691 | 2,040 | 750,805 |
| 19 Looking-glass and picture frames | 3 | | | | 350 | 2,900 | 5 | | | 4 | 2,200 |
| 20 Lumber, planing mill products, including sash, doors, and blinds | 4 | 48,710 | | 3,150 | 24,500 | 21,060 | 4 | 6 | 5,130 | 90 | 35,396 |
| 21 Mattresses and spring beds | 4 | 39,974 | | | 7,622 | 32,352 | 4 | 8 | 4,660 | 25 | 7,340 |
| 22 Millinery, custom work | 7 | 35,025 | 2,000 | 3,000 | 1,225 | 28,800 | 11 | 3 | 4,600 | 68 | 24,600 |
| 23 Mineral and soda waters | 3 | 13,500 | | | 3,000 | 5,500 | 3 | 3 | 2,320 | 23 | 3,400 |
| 24 Patent medicines and compounds | 4 | 12,110 | | | 1,585 | 10,525 | 6 | 9 | 3,335 | 11 | 4,500 |
| 25 Photography | 8 | 10,225 | | 400 | 6,300 | 3,525 | 8 | | | 13 | 5,950 |
| 26 Plumbing, and gas and steam fitting | 9 | 28,800 | | | 2,750 | 26,050 | 10 | 8 | 7,100 | 77 | 33,700 |
| 27 Printing and publishing, book and job | 5 | 87,643 | | | 57,416 | 30,227 | 3 | 14 | 14,544 | 99 | 52,685 |
| 28 Printing and publishing, newspapers and periodicals | 13 | 145,050 | 100 | | 102,100 | 42,850 | 8 | 50 | 51,730 | 104 | 62,000 |
| 29 Saddlery and harness | 6 | 9,523 | | | 1,816 | 7,707 | 6 | 1 | 864 | 6 | 2,547 |
| 30 Tinsmithing, coppersmithing, and sheet-iron working | 4 | 20,224 | 4,200 | 1,462 | 2,646 | 20,916 | 3 | 4 | 5,500 | 35 | 14,949 |
| 31 Tobacco, cigars and cigarettes | 5 | 2,542 | 500 | 150 | 182 | 1,710 | 6 | | | 11 | 4,992 |
| 32 Watch, clock, and jewelry repairing | 13 | 11,725 | | | 8,350 | 3,375 | 20 | | | 13 | 9,490 |
| 33 All other industries ¹ | 42 | 2,338,949 | 254,630 | 418,344 | 1,215,277 | 460,698 | 37 | 83 | 91,399 | 1,350 | 307,058 |

¹ Embraces baking and yeast powders, 1; brass castings and brass finishing, 2; bronze castings, 1; brooms and brushes, 1; clothing, men's, factory product, 2; coke, 2; cotton, compressing, 2; cotton goods, 2; fertilizers, 1; fruits and vegetables, canning and preserving, 1; furniture, factory product, 1; gas, illuminating and heating, 1; glass, cutting, staining, and ornamenting, 1; ice, artificial, 2; ironwork, architectural and ornamental, 1; liquors, malt, 2; lumber and timber

MOBILE.

| | | | | | | | | | | | |
|--|-----|-------------|-----------|-----------|-------------|-------------|-----|-----|-----------|-------|-------------|
| 1 All industries | 222 | \$3,294,238 | \$318,100 | \$539,886 | \$1,144,478 | \$1,291,774 | 238 | 203 | \$178,810 | 2,827 | \$1,189,605 |
| 2 Awnings, tents, and sails | 3 | 4,450 | | | 1,250 | 3,200 | 3 | | | 9 | 6,625 |
| 3 Bicycle and tricycle repairing | 4 | 4,985 | | | 285 | 4,700 | 5 | | | 4 | 719 |
| 4 Blacksmithing and wheelwrighting | 10 | 18,375 | 3,550 | 6,350 | 3,875 | 4,600 | 12 | 1 | 75 | 3 | 10,404 |
| 5 Boots and shoes, custom work and repairing | 13 | 6,635 | 2,500 | 1,500 | 1,955 | 680 | 13 | | | 23 | 1,140 |
| 6 Bread and other bakery products | 17 | 61,810 | 18,900 | 20,800 | 9,895 | 12,215 | 18 | 8 | 3,050 | 75 | 29,253 |
| 7 Carpentering | 3 | 18,100 | | | 2,800 | 15,300 | 4 | 1 | 900 | 80 | 33,230 |
| 8 Carriages and wagons | 5 | 5,550 | 500 | 200 | 1,600 | 3,250 | 4 | 1 | 500 | 21 | 3,906 |
| 9 Clothing, men's, custom work and repairing | 10 | 17,760 | | | 1,410 | 16,350 | 11 | 1 | 250 | 24 | 11,150 |
| 10 Clothing, men's, factory product | 3 | 24,600 | | | 6,100 | 18,500 | 5 | 7 | 4,400 | 24 | 6,750 |
| 11 Confectionery | 5 | 10,250 | 2,500 | 1,075 | 1,175 | 5,500 | 6 | 5 | 1,930 | 9 | 2,750 |
| 12 Cooperage | 3 | 31,900 | | 400 | 20,000 | 11,500 | 2 | 1 | 900 | 31 | 14,200 |
| 13 Flouring and grist mill products | 3 | 62,000 | 2,000 | 6,000 | 12,000 | 42,000 | 3 | 7 | 6,140 | 23 | 3,500 |
| 14 Foundry and machine shop products | 7 | 185,300 | 6,600 | 33,000 | 70,900 | 74,800 | 10 | 11 | 10,580 | 232 | 120,330 |
| 15 Furniture, cabinetmaking, repairing, and upholstering | 3 | 2,900 | | | 200 | 2,700 | 3 | | | 3 | 600 |
| 16 Lock and gun smithing | 5 | 7,075 | 150 | 350 | 725 | 5,850 | 4 | | | 3 | 1,230 |
| 17 Looking-glass and picture frames | 3 | 2,250 | | | 650 | 1,600 | 3 | 1 | 240 | | |
| 18 Lumber and timber products | 4 | 342,650 | 141,550 | 15,500 | 91,100 | 94,500 | 3 | 16 | 21,560 | 321 | 113,400 |
| 19 Masonry, brick and stone | 5 | 228,300 | | 50 | 22,450 | 203,800 | 9 | 9 | 5,100 | 36 | 39,850 |
| 20 Millinery, custom work | 5 | 28,475 | 3,000 | 3,000 | 300 | 22,175 | 5 | 7 | 2,000 | 17 | 4,660 |
| 21 Mineral and soda waters | 3 | 16,900 | | | 5,100 | 3,800 | 3 | 2 | 2,220 | 14 | 9,232 |
| 22 Photography | 4 | 14,200 | | 150 | 9,000 | 5,050 | 4 | 1 | 312 | 10 | 5,054 |
| 23 Plumbing, and gas and steam fitting | 16 | 55,435 | 2,000 | 1,000 | 2,135 | 50,250 | 20 | 9 | 4,060 | 86 | 42,135 |
| 24 Printing and publishing, book and job | 9 | 54,205 | | | 33,855 | 20,350 | 15 | | | 66 | 24,943 |
| 25 Printing and publishing, newspapers and periodicals | 6 | 122,150 | 5,000 | 20,000 | 47,000 | 50,150 | 10 | 15 | 17,044 | 74 | 43,532 |
| 26 Ship and boat building, wooden | 4 | 146,026 | 24,000 | 2,500 | 31,750 | 87,776 | 2 | 3 | 4,300 | 291 | 100,816 |

BY SPECIFIED INDUSTRIES: 1900.

BIRMINGHAM.

| AVERAGE NUMBER OF WAGE-EARNERS AND TOTAL WAGES—continued. | | | | | | MISCELLANEOUS EXPENSES. | | | | | COST OF MATERIALS USED. | | | Value of products, including custom work and repairing. | |
|---|-------------|---------------------------|-----------|---------------------------|----------|-------------------------|----------------|--|---------------------------------|----------------|-------------------------|---|----------------------------------|---|----|
| Men, 16 years and over. | | Women, 16 years and over. | | Children, under 16 years. | | Total. | Rent of works. | Taxes, not including internal revenue. | Rent of offices, interest, etc. | Contract work. | Total. | Principal materials, including mill supplies and freight. | Fuel and rent of power and heat. | | |
| Average number. | Wages. | Average number. | Wages. | Average number. | Wages. | | | | | | | | | | |
| 5,980 | \$2,440,998 | 484 | \$122,975 | 211 | \$28,248 | \$538,868 | \$82,801 | \$40,630 | \$380,920 | \$29,017 | \$6,045,552 | \$1,898,413 | \$1,152,139 | \$12,581,066 | 1 |
| 16 | 6,500 | | | | | 2,320 | 1,630 | 80 | 610 | | 8,834 | 8,635 | 199 | 26,375 | 2 |
| 34 | 14,510 | | | | 89 | 3,297 | 2,266 | 189 | 842 | | 11,919 | 11,051 | 868 | 52,852 | 3 |
| 28 | 10,290 | 1 | 200 | 1 | | 3,422 | 3,292 | 62 | 65 | | 18,830 | 18,760 | 70 | 52,170 | 4 |
| 70 | 23,352 | 17 | 3,200 | | | 13,142 | 4,540 | 1,058 | 2,008 | 5,586 | 144,614 | 140,418 | 4,196 | 252,658 | 5 |
| 61 | 18,816 | | | 14 | 1,975 | 665 | 595 | 40 | 30 | | 6,973 | 2,278 | 4,695 | 41,200 | 6 |
| 115 | 59,550 | | | | | 11,512 | 1,510 | 217 | 785 | 9,000 | 72,763 | 72,757 | 6 | 165,775 | 7 |
| 54 | 22,700 | | | | | 8,825 | 2,440 | 275 | 1,110 | | 27,850 | 27,200 | 650 | 69,750 | 8 |
| 1,187 | 608,051 | 8 | 1,860 | | | 5,952 | | 3,028 | 2,921 | | 483,481 | 477,080 | 6,401 | 1,117,706 | 9 |
| 60 | 35,702 | 19 | 6,650 | 1 | 80 | 9,500 | 7,448 | 640 | 1,412 | | 77,890 | 77,220 | 170 | 184,100 | 10 |
| | | 64 | 15,828 | | | 2,802 | 1,604 | 78 | 625 | | 10,175 | 10,075 | 100 | 47,470 | 11 |
| 5 | 2,240 | 5 | 1,200 | | | 2,747 | 642 | 65 | 2,040 | | 18,489 | 13,823 | 166 | 37,050 | 12 |
| 14 | 4,150 | 4 | 585 | | | 2,360 | 1,822 | 102 | 445 | | 2,527 | 2,149 | 378 | 17,448 | 13 |
| 84 | 16,480 | | | 2 | 175 | 6,950 | 2,980 | 270 | 2,700 | 1,000 | 60,115 | 59,225 | 890 | 92,900 | 14 |
| 14 | 4,530 | | | | | 5,318 | 3,271 | 216 | 1,831 | | 256,763 | 253,967 | 2,796 | 287,342 | 15 |
| 873 | 339,866 | | | | | 76,093 | 8,700 | 4,429 | 62,964 | | 701,043 | 676,862 | 24,181 | 1,418,236 | 16 |
| 5 | 2,050 | | | | | 861 | 260 | 66 | 35 | | 1,040 | 1,040 | | 5,300 | 17 |
| 2,082 | 750,570 | | | 8 | 825 | 182,718 | 1,075 | 18,860 | 117,783 | | 2,568,172 | 1,500,368 | 1,067,804 | 5,461,358 | 18 |
| 4 | 2,200 | | | | | 705 | 660 | 20 | 25 | | 5,315 | 5,300 | 15 | 12,600 | 19 |
| 90 | 35,396 | | | | | 2,806 | 1,855 | 535 | 916 | | 76,568 | 75,590 | 978 | 140,230 | 20 |
| 17 | 5,300 | 8 | 2,040 | | | 3,884 | 2,094 | 206 | 1,534 | | 53,842 | 53,427 | 415 | 78,120 | 21 |
| 5 | 3,000 | 63 | 21,600 | | | 4,171 | 3,780 | 286 | 155 | | 60,675 | 60,350 | 325 | 123,600 | 22 |
| 23 | 8,400 | | | | | 1,342 | 480 | 325 | 537 | | 16,336 | 16,251 | 85 | 56,159 | 23 |
| 9 | 4,500 | 2 | 300 | | | 8,939 | 522 | 117 | 3,300 | | 11,586 | 11,534 | 52 | 32,500 | 24 |
| 12 | 5,550 | 1 | 400 | | | 3,019 | 2,598 | 156 | 65 | 200 | 7,055 | 6,950 | 105 | 23,237 | 25 |
| 77 | 33,700 | | | | | 4,416 | 2,895 | 681 | 340 | | 61,523 | 61,025 | 498 | 144,700 | 26 |
| 83 | 48,257 | 16 | 4,428 | | | 6,094 | 2,740 | 525 | 2,829 | | 63,410 | 61,005 | 1,805 | 148,690 | 27 |
| 97 | 59,740 | 4 | 1,910 | 8 | 350 | 48,837 | 5,421 | 876 | 31,259 | 11,281 | 61,425 | 58,953 | 2,407 | 286,420 | 28 |
| 5 | 2,484 | | | 1 | 113 | 2,027 | 987 | 25 | 1,015 | | 6,581 | 6,551 | 30 | 14,670 | 29 |
| 34 | 14,907 | | | 1 | 42 | 4,797 | 755 | 272 | 1,770 | 2,000 | 54,337 | 53,827 | 1,010 | 103,100 | 30 |
| 9 | 4,800 | | | 2 | 192 | 5,237 | 1,982 | 87 | 3,218 | | 10,290 | 10,280 | 10 | 33,530 | 31 |
| 12 | 9,300 | | | 1 | 100 | 3,251 | 2,649 | 195 | 407 | | 8,196 | 8,037 | 159 | 34,245 | 32 |
| 901 | 283,977 | 272 | 63,274 | 177 | 19,807 | 156,350 | 9,858 | 11,654 | 134,838 | | 1,081,935 | 1,051,770 | 30,165 | 2,019,506 | 33 |

products, 1; marble and stone work, 1; masonry, brick and stone, 1; monuments and tombstones, 2; oil, cottonseed and cake, 2; painting, house, sign, etc., 2; paper hanging, 1; roofing and roofing materials, 2; tobacco, chewing, smoking, and snuff, 1; trunks and valises, 2; typewriter repairing, 2; vinegar and cider, 2.

MOBILE.

| | | | | | | | | | | | | | | | |
|-------|-------------|----|----------|----|---------|-----------|----------|----------|-----------|----------|-------------|-------------|----------|-------------|----|
| 2,086 | \$1,114,037 | 83 | \$20,030 | 58 | \$5,538 | \$272,987 | \$56,866 | \$22,336 | \$180,395 | \$13,890 | \$2,046,400 | \$1,986,002 | \$60,398 | \$1,451,062 | 1 |
| 9 | 6,625 | | | | | 547 | 320 | 15 | 212 | | 21,110 | 21,110 | | 87,500 | 2 |
| 2 | 500 | | | 2 | 219 | 943 | 876 | 47 | 20 | | 1,675 | 1,675 | | 5,800 | 3 |
| 23 | 10,404 | | | | | 1,584 | 1,164 | 210 | 210 | | 13,603 | 13,177 | 426 | 33,240 | 4 |
| 3 | 1,140 | | | | | 1,080 | 920 | 96 | 64 | | 4,195 | 4,195 | | 12,307 | 5 |
| 75 | 29,253 | | | | | 3,956 | 3,021 | 538 | 397 | | 93,261 | 90,139 | 3,122 | 162,400 | 6 |
| 80 | 33,280 | | | | | 1,030 | 480 | 100 | 450 | | 39,800 | 39,050 | 250 | 103,000 | 7 |
| 21 | 8,906 | | | | | 1,466 | 1,220 | 53 | 193 | | 12,236 | 12,043 | 193 | 35,270 | 8 |
| 21 | 10,150 | 3 | 1,000 | | | 4,645 | 3,276 | 253 | 1,016 | | 17,360 | 17,360 | | 42,150 | 9 |
| 9 | 2,750 | 24 | 6,750 | | | 2,428 | 2,132 | 146 | 150 | | 33,600 | 33,400 | 200 | 62,800 | 10 |
| | | | | | | 2,455 | 1,810 | 140 | 605 | | 11,935 | 11,651 | 284 | 12,140 | 11 |
| 81 | 14,200 | | | | | 3,848 | 1,130 | 342 | 2,375 | | 13,040 | 12,940 | 100 | 46,000 | 12 |
| 23 | 8,500 | | | | | 4,505 | 3,000 | 455 | 1,050 | | 403,996 | 399,696 | 4,300 | 454,144 | 13 |
| 249 | 120,570 | | | 3 | 260 | 8,127 | 2,838 | 1,155 | 4,134 | | 103,100 | 98,650 | 9,450 | 304,487 | 14 |
| 3 | 600 | | | | | 698 | 640 | 88 | 20 | | 1,775 | 1,775 | | 5,850 | 15 |
| 3 | 1,230 | | | | | 879 | 634 | 37 | 158 | | 2,070 | 2,070 | | 6,100 | 16 |
| 321 | 113,400 | | | | | 870 | 785 | 25 | 50 | | 3,140 | 3,140 | | 7,450 | 17 |
| 86 | 39,850 | | | | | 13,087 | 4,620 | 2,610 | 5,857 | | 299,672 | 299,672 | | 566,800 | 18 |
| | | 17 | 4,660 | | | 15,737 | 405 | 107 | 1,575 | 13,850 | 104,339 | 104,339 | | 187,461 | 19 |
| 14 | 9,282 | | | | | 2,375 | 1,540 | 165 | 670 | | 13,750 | 13,750 | | 33,200 | 20 |
| | | | | | | 1,975 | 965 | 196 | 314 | | 7,734 | 7,566 | 168 | 29,000 | 21 |
| 7 | 4,182 | 2 | 728 | 1 | 144 | 3,252 | 2,050 | 145 | 1,057 | | 6,815 | 6,315 | | 17,750 | 22 |
| 84 | 41,968 | | | 2 | 217 | 4,932 | 2,905 | 755 | 1,272 | | 95,531 | 95,132 | 449 | 133,174 | 23 |
| 59 | 22,698 | 4 | 1,960 | 3 | 290 | 4,941 | 3,215 | 492 | 1,234 | | 20,949 | 19,725 | 1,224 | 71,730 | 24 |
| 70 | 43,046 | 1 | 240 | 8 | 276 | 9,766 | 1,240 | 537 | 7,749 | 240 | 17,341 | 14,634 | 2,707 | 127,930 | 25 |
| 291 | 100,816 | | | | | 6,018 | 2,350 | 1,529 | 2,134 | | 75,218 | 74,943 | 275 | 236,142 | 26 |

TABLE 8.—MANUFACTURES IN CITIES

MOBILE—Continued.

| MANUFACTURING AND MECHANICAL INDUSTRIES, AND CITIES AND TOWNS. | Number of establishments. | CAPITAL. | | | | | Proprietors and firm members. | SALARIED OFFICIALS, CLERKS, ETC. | | AVERAGE NUMBER OF WAGE-EARNERS AND TOTAL WAGES. | |
|--|---------------------------|-----------|---------|------------|-----------------------------------|--------------------|-------------------------------|----------------------------------|-----------|---|----------|
| | | Total. | Land. | Buildings. | Machinery, tools, and implements. | Cash and sundries. | | Number. | Salaries. | Total. | |
| | | | | | | | | | | Average number. | Wages. |
| 27 Tinsmithing, coppersmithing, and sheet-iron working. | 8 | \$91,900 | \$4,100 | \$8,117 | \$8,160 | \$46,583 | 8 | 3 | \$2,910 | 44 | \$16,856 |
| 28 Tobacco, cigars and cigarettes. | 11 | 92,050 | 8,500 | 6,600 | 2,050 | 79,900 | 11 | 16 | 12,330 | 145 | 70,640 |
| 29 Watch, clock, and jewelry repairing. | 12 | 7,980 | 500 | 1,000 | 8,325 | 3,155 | 12 | | | 14 | 10,589 |
| 30 All other industries ¹ . | 88 | 1,662,467 | 97,750 | 417,294 | 753,388 | 894,040 | 30 | 78 | 72,940 | 1,075 | 401,435 |

¹ Embraces baking and yeast powders, 1; bookbinding and blank book making, 1; boot and shoe uppers, 1; boxes, cigar, 1; brick and tile, 1; brooms and brushes, 2; cars and general shop construction and repairs by steam railroad companies, 1; cotton goods, 1; dyeing and cleaning, 2; electrical construction and repairs, 1; fertilizers, 1; gas, illuminating and heating, 2; hairwork, 1; hand stamps, 1; ice, artificial, 2; liquors, malt, 1; lumber, planing mill products, including

MONTGOMERY.

| | | \$2,930,782 | \$243,950 | \$179,578 | \$1,006,895 | \$1,200,359 | 196 | 204 | \$163,537 | 2,359 | \$802,188 |
|---|-----|-------------|-----------|-----------|-------------|-------------|-----|-----|-----------|-------|-----------|
| 1 All industries | 163 | | | | | | | | | | |
| 2 Blacksmithing and wheelwrighting | 9 | 3,487 | 50 | 50 | 1,220 | 2,167 | 13 | 1 | 240 | 23 | 7,787 |
| 3 Boots and shoes, custom work and repairing. | 12 | 1,901 | | | 1,806 | 595 | 13 | | | 10 | 2,572 |
| 4 Bread and other bakery products | 5 | 92,807 | 16,000 | 20,000 | 29,694 | 21,118 | 5 | 14 | 7,028 | 72 | 20,556 |
| 5 Carpentering | 6 | 36,060 | 4,350 | 3,700 | 1,810 | 26,200 | 9 | 2 | 990 | 108 | 38,760 |
| 6 Carriages and wagons. | 3 | 86,456 | 5,000 | 2,500 | 2,529 | 26,427 | 3 | 7 | 5,480 | 47 | 15,400 |
| 7 Cars and general shop construction and repairs by steam railroad companies. | 8 | 196,989 | 31,250 | 57,110 | 33,190 | 75,439 | | 9 | 8,229 | 327 | 146,783 |
| 8 Clothing, men's, custom work and repairing. | 9 | 27,150 | | | 2,200 | 24,950 | 12 | 2 | 2,120 | 48 | 21,000 |
| 9 Clothing, women's, dressmaking | 4 | 2,410 | | | 760 | 1,650 | 4 | | | 30 | 4,070 |
| 10 Confectionery | 6 | 98,050 | | | 19,350 | 78,700 | 11 | 27 | 10,515 | 81 | 12,721 |
| 11 Dyeing and cleaning. | 8 | 8,125 | | | 1,030 | 2,015 | 4 | 3 | 1,536 | 9 | 2,682 |
| 12 Foundry and machine shop products. | 5 | 188,878 | 53,000 | 25,500 | 56,300 | 54,078 | 7 | 8 | 7,360 | 87 | 34,500 |
| 13 Furniture, cabinetmaking, repairing, and upholstering. | 3 | 925 | | | 275 | 650 | 3 | | | 3 | 1,240 |
| 14 Ice, artificial | 3 | 40,700 | 800 | 6,200 | 28,000 | 5,700 | 4 | 2 | 1,200 | 8 | 3,945 |
| 15 Lumber, planing mill products, including sash, doors, and blinds. | 3 | 21,000 | 3,000 | 1,600 | 11,500 | 5,000 | 4 | 2 | 1,750 | 31 | 12,220 |
| 16 Masonry, brick and stone. | 3 | 45,157 | | | 6,500 | 38,657 | 6 | 3 | 2,700 | 247 | 118,440 |
| 17 Millinery, custom work | 9 | 48,765 | | | 465 | 48,300 | 13 | 23 | 13,940 | 53 | 19,080 |
| 18 Painting, house, sign, etc. | 3 | 1,350 | | | 450 | 900 | 3 | | | 5 | 3,025 |
| 19 Photography | 4 | 7,190 | | 40 | 4,600 | 2,550 | 4 | | | 3 | 1,065 |
| 20 Plumbing, and gas and steam fitting | 7 | 11,750 | | | 1,250 | 10,500 | 10 | 1 | 900 | 43 | 13,876 |
| 21 Printing and publishing, book and job. | 6 | 39,401 | | | 29,900 | 9,501 | 9 | 2 | 2,400 | 56 | 14,287 |
| 22 Printing and publishing, newspapers and periodicals. | 3 | 56,700 | 2,500 | 2,000 | 37,700 | 14,500 | 1 | 5 | 5,820 | 57 | 83,292 |
| 23 Saddlery and harness | 4 | 2,632 | | | 1,115 | 1,517 | 5 | 1 | 120 | 2 | 357 |
| 24 Tinsmithing, coppersmithing, and sheet-iron working. | 4 | 5,595 | 1,000 | 1,500 | 1,375 | 1,720 | 6 | | | 8 | 3,233 |
| 25 Watch, clock, and jewelry repairing. | 10 | 5,650 | | | 2,540 | 3,110 | 11 | | | 8 | 9,100 |
| 26 All other industries ¹ . | 36 | 1,956,654 | 127,000 | 353,478 | 731,786 | 744,390 | 36 | 92 | 90,609 | 993 | 257,147 |

¹ Embraces awnings, tents, and sails, 1; bicycle and tricycle repairing, 2; bottling, 1; brick and tile, 1; brooms and brushes, 1; cars and general shop construction and repairs by street railroad companies, 1; clothing, men's, factory product, 2; cordage and twine, 1; cotton, compressing, 1; cotton, ginning, 1; cotton goods, 2; electrical construction and repairs, 2; fertilizers, 2; gas, illuminating and heating, 1; liquors, distilled, 1; liquors, malt, 1; lock and gun smithing, 1; looking-glass

TABLE 9.—MANUFACTURES IN CITIES AND

| | | \$15,567,522 | \$1,203,201 | \$4,138,548 | \$4,898,106 | \$5,207,667 | 559 | 532 | \$488,013 | 10,820 | \$3,555,503 |
|-------------------------------|-----|--------------|-------------|-------------|-------------|-------------|-----|-----|-----------|--------|-------------|
| 1 Total for cities and towns. | 555 | | | | | | | | | | |
| 2 Anniston | 59 | 2,396,273 | 146,540 | 451,830 | 929,320 | 868,583 | 52 | 64 | 64,566 | 1,997 | 649,983 |
| 3 Bessemer | 42 | 3,620,082 | 519,287 | 1,166,584 | 833,260 | 1,101,001 | 33 | 49 | 57,639 | 1,669 | 605,741 |
| 4 Decatur | 24 | 229,807 | 83,500 | 23,875 | 82,645 | 89,787 | 25 | 10 | 7,032 | 198 | 54,650 |
| 5 Florence | 33 | 371,373 | 60,200 | 219,326 | 178,309 | 413,533 | 30 | 52 | 39,337 | 595 | 177,813 |
| 6 Fort Payne | 17 | 85,405 | 1,195 | 11,010 | 19,190 | 54,010 | 21 | 6 | 4,600 | 88 | 87,932 |
| 7 Gadsden | 35 | 1,184,805 | 155,575 | 395,260 | 222,586 | 411,384 | 47 | 25 | 25,078 | 520 | 165,475 |
| 8 Huntsville | 79 | 1,877,781 | 96,237 | 233,180 | 835,050 | 668,314 | 85 | 53 | 51,308 | 1,203 | 283,575 |
| 9 New Decatur | 30 | 1,348,871 | 45,250 | 316,725 | 499,810 | 487,086 | 25 | 56 | 51,784 | 1,521 | 700,196 |
| 10 Opelika | 30 | 143,275 | 8,650 | 16,800 | 52,955 | 69,870 | 34 | 22 | 12,490 | 214 | 48,023 |
| 11 Phenix | 6 | 33,595 | 3,300 | 8,675 | 13,910 | 7,710 | 5 | | 800 | 16 | 4,543 |
| 12 Selma | 93 | 1,296,308 | 49,605 | 229,748 | 568,638 | 448,317 | 98 | 133 | 106,400 | 1,343 | 392,016 |
| 13 Sheffield | 21 | 1,229,258 | 89,600 | 569,749 | 210,746 | 356,163 | 25 | 25 | 34,300 | 678 | 246,009 |
| 14 Talladega | 22 | 24,487 | 24,487 | 333,761 | 233,468 | 206,703 | 13 | 13 | 14,981 | 348 | 77,311 |
| 15 Tuscaloosa | 43 | 353,925 | 15,450 | 52,560 | 207,569 | 78,346 | 44 | 13 | 16,682 | 407 | 104,141 |
| 16 Tusculumbia | 16 | 46,350 | 14,325 | 9,525 | 10,650 | 11,350 | 22 | 2 | 396 | 28 | 8,040 |

BY SPECIFIED INDUSTRIES: 1900—Continued.

MOBILE—Continued.

| AVERAGE NUMBER OF WAGE-EARNERS AND TOTAL WAGES—continued. | | | | | | MISCELLANEOUS EXPENSES. | | | | | COST OF MATERIALS USED. | | | Value of products, including custom work and repairing. | |
|---|----------|---------------------------|---------|---------------------------|--------|-------------------------|----------------|--|---------------------------------|----------------|-------------------------|---|----------------------------------|---|----|
| Men, 16 years and over. | | Women, 16 years and over. | | Children, under 16 years. | | Total. | Rent of works. | Taxes, not including internal revenue. | Rent of offices, interest, etc. | Contract work. | Total. | Principal materials, including mill supplies and freight. | Fuel and rent of power and heat. | | |
| Average number. | Wages. | Average number. | Wages. | Average number. | Wages. | | | | | | | | | | |
| 48 | \$16,786 | | | 1 | \$120 | \$2,707 | \$984 | \$479 | \$1,244 | | \$43,995 | \$43,392 | \$603 | \$99,010 | 27 |
| 144 | 70,490 | | | 1 | 150 | 24,108 | 3,760 | 726 | 19,622 | | 66,475 | 66,475 | | 200,000 | 28 |
| 14 | 10,580 | | | | | 1,877 | 1,645 | 187 | 45 | | 2,680 | 2,680 | | 25,100 | 29 |
| 1,001 | 392,881 | 32 | \$4,692 | 42 | 3,862 | 143,256 | 6,381 | 10,757 | 126,113 | | 511,955 | 475,303 | 36,647 | 1,848,115 | 30 |

sash, doors, and blinds, 2; marble and stone work, 2; mattresses and spring beds, 1; oil, cottonseed and cake, 1; painting, house, sign, etc., 2; roofing and roofing materials, 1; saddlery and harness, 2; sewing machine repairing, 2; shirts, 1; trunks and valises, 1; upholstering materials, 1; vinegar and cider, 1; woodenware, not elsewhere specified, 1.

MONTGOMERY.

| | | | | | | | | | | | | | | | |
|-------|-----------|-----|----------|-----|----------|-----------|----------|----------|-----------|---------|-------------|-------------|----------|-------------|----|
| 1,856 | \$711,533 | 360 | \$74,887 | 143 | \$15,768 | \$342,890 | \$36,577 | \$28,038 | \$276,712 | \$1,563 | \$2,902,054 | \$2,840,353 | \$61,701 | \$5,085,190 | 1 |
| 23 | 7,787 | | | | | 1,702 | 1,616 | 2 | 84 | | 6,703 | 6,443 | 260 | 27,585 | 2 |
| 10 | 2,572 | | | | | 1,547 | 1,419 | 17 | 111 | | 4,045 | 3,932 | 113 | 14,287 | 3 |
| 52 | 16,922 | 12 | 2,554 | 8 | 1,030 | 5,493 | 2,640 | 990 | 1,863 | | 89,897 | 87,291 | 2,606 | 165,820 | 4 |
| 108 | 38,760 | | | | | 2,099 | | 179 | 920 | 1,000 | 61,470 | 61,817 | 153 | 183,550 | 5 |
| 47 | 15,400 | | | | | 3,388 | 1,500 | 638 | 1,250 | | 23,551 | 22,921 | 630 | 59,810 | 6 |
| 325 | 146,433 | 2 | 850 | | | 5,879 | | 2,065 | 2,914 | | 189,241 | 187,479 | 1,762 | 350,132 | 7 |
| 43 | 19,400 | 5 | 1,510 | | | 3,665 | 1,710 | 545 | 1,410 | | 23,226 | 22,599 | 627 | 67,877 | 8 |
| | | 30 | 4,070 | | | 438 | 406 | | 32 | | 4,103 | 4,056 | 47 | 13,165 | 9 |
| 50 | 9,927 | 13 | 1,750 | 18 | 1,014 | 10,843 | 5,236 | 747 | 4,810 | | 65,543 | 63,880 | 1,663 | 137,311 | 10 |
| 7 | 2,344 | 1 | 260 | 1 | 78 | 1,346 | 550 | | 786 | | 3,850 | 3,735 | 85 | 13,659 | 11 |
| 87 | 34,500 | | | | | 6,554 | 780 | 1,664 | 4,110 | | 76,837 | 71,847 | 4,990 | 167,340 | 12 |
| 3 | 1,240 | | | | | 453 | 410 | | 43 | | 1,400 | 1,400 | | 3,925 | 13 |
| 8 | 3,945 | | | | | 1,190 | 180 | 165 | 845 | | 2,020 | 1,100 | 920 | 20,325 | 14 |
| 31 | 12,220 | | | | | 1,205 | 276 | 150 | 734 | 45 | 10,204 | 9,670 | 525 | 36,500 | 15 |
| 247 | 118,440 | | | | | 1,532 | | 602 | 980 | | 291,050 | 291,000 | 50 | 454,500 | 16 |
| 2 | 700 | 51 | 13,380 | | | 12,336 | 5,196 | 482 | 7,158 | | 33,587 | 33,500 | 87 | 153,825 | 17 |
| 5 | 3,025 | | | | | 425 | 390 | | 35 | | 758 | 740 | 18 | 5,750 | 18 |
| 3 | 1,065 | | | | | 1,675 | 924 | 46 | 705 | | 4,348 | 4,301 | 47 | 16,800 | 19 |
| 43 | 13,876 | | | | | 3,202 | 1,330 | 292 | 1,080 | | 25,009 | 24,813 | 196 | 61,650 | 20 |
| 39 | 11,336 | 12 | 2,612 | 5 | 399 | 3,258 | 1,720 | 324 | 1,171 | 43 | 16,066 | 15,939 | 667 | 48,920 | 21 |
| 56 | 38,032 | 1 | 260 | | | 4,230 | 1,475 | 485 | 2,320 | | 15,624 | 13,962 | 1,632 | 83,060 | 22 |
| 1 | 285 | | | 1 | 72 | 635 | 560 | | 75 | | 2,829 | 2,767 | 32 | 8,049 | 23 |
| 5 | 2,958 | | | 3 | 825 | 530 | 450 | 30 | 50 | | 3,716 | 3,665 | 51 | 12,473 | 24 |
| 8 | 9,100 | | | | | 2,688 | 2,034 | 156 | 498 | | 3,087 | 2,990 | 97 | 20,460 | 25 |
| 653 | 201,176 | 233 | 43,141 | 107 | 12,830 | 260,027 | 5,225 | 17,609 | 242,718 | 475 | 1,893,390 | 1,849,447 | 44,443 | 2,959,039 | 26 |

and picture frames, 2; marble and stone work, 2; mineral and soda waters, 2; oil, cottonseed and cake, 2; optical goods, 1; paving and paving materials, 1; sewing machine repairing, 1; slaughtering, wholesale, not including meat packing, 1; tobacco, cigars and cigarettes, 1; typewriter repairing, 1.

TOWNS UNDER 20,000 IN POPULATION: 1900.

| | | | | | | | | | | | | | | | |
|-------|-------------|-----|-----------|-----|----------|-------------|----------|----------|-----------|----------|--------------|--------------|-------------|--------------|----|
| 9,179 | \$3,325,915 | 933 | \$159,934 | 708 | \$69,654 | \$1,059,783 | \$50,079 | \$33,599 | \$908,975 | \$17,130 | \$12,770,975 | \$11,181,402 | \$1,589,573 | \$20,204,633 | 1 |
| 1,593 | 591,531 | 242 | 36,803 | 162 | 21,599 | 134,530 | 6,168 | 13,093 | 109,779 | 5,490 | 1,414,873 | 1,342,384 | 72,489 | 2,594,758 | 2 |
| 1,652 | 602,488 | 4 | 960 | 13 | 2,298 | 317,590 | 9,343 | 19,431 | 288,816 | | 2,206,651 | 1,491,059 | 715,595 | 3,561,549 | 3 |
| 139 | 52,792 | 4 | 1,530 | 5 | 328 | 7,574 | 952 | 1,452 | 5,070 | 100 | 108,799 | 106,049 | 2,750 | 237,265 | 4 |
| 557 | 173,177 | 1 | 306 | 37 | 4,336 | 50,370 | 1,212 | 4,241 | 44,917 | | 693,432 | 588,344 | 105,088 | 1,037,471 | 5 |
| 84 | 37,402 | 4 | 530 | | | 4,206 | 374 | 413 | 3,819 | 100 | 71,652 | 66,796 | 4,856 | 155,916 | 6 |
| 503 | 162,008 | 9 | 2,635 | 8 | 782 | 24,180 | 2,257 | 2,617 | 19,103 | 200 | 463,733 | 387,721 | 76,017 | 843,751 | 7 |
| 684 | 218,233 | 232 | 53,079 | 237 | 17,213 | 152,637 | 7,015 | 11,092 | 131,553 | 2,972 | 1,041,863 | 1,014,028 | 27,840 | 1,880,461 | 8 |
| 1,510 | 698,796 | 4 | 844 | 7 | 556 | 81,286 | 1,649 | 5,891 | 72,946 | 800 | 3,733,549 | 3,697,355 | 36,194 | 4,376,919 | 9 |
| 206 | 47,383 | 6 | 435 | 2 | 200 | 10,943 | 2,642 | 3,269 | 5,032 | | 206,385 | 202,564 | 4,321 | 335,676 | 10 |
| 16 | 4,548 | | | | | 5,361 | 93 | 225 | 5,043 | | 7,644 | 4,789 | 2,855 | 22,350 | 11 |
| 981 | 336,222 | 248 | 43,933 | 114 | 11,811 | 93,034 | 13,079 | 11,955 | 61,032 | 6,968 | 1,163,936 | 1,116,144 | 47,792 | 2,015,777 | 12 |
| 663 | 242,628 | 3 | 551 | 12 | 2,330 | 123,390 | 777 | 5,634 | 116,979 | | 874,592 | 498,366 | 376,226 | 1,461,418 | 13 |
| 229 | 65,207 | 54 | 7,050 | 60 | 5,054 | 25,979 | 1,197 | 1,951 | 22,831 | | 427,544 | 320,905 | 106,549 | 583,902 | 14 |
| 286 | 90,619 | 71 | 10,966 | 50 | 2,556 | 26,918 | 2,627 | 1,854 | 21,937 | 500 | 304,529 | 294,546 | 9,984 | 511,638 | 15 |
| 26 | 7,776 | 1 | 168 | 1 | 96 | 1,785 | 694 | 481 | 610 | | 51,230 | 50,263 | 1,017 | 80,787 | 16 |

CENSUS BULLETIN.

No. 118.

WASHINGTON, D. C.

December 10, 1901.

MANUFACTURES.

GEORGIA.

Hon. WILLIAM R. MERRIAM,
Director of the Census.

SIR: I transmit herewith, for publication in bulletin form, the statistics of manufacturing and mechanical industries for the state of Georgia for the census year 1900, taken in accordance with the provisions of section 7 of the act of March 3, 1899. This section requires that "The schedules of inquiries relating to the products of manufacturing and mechanical establishments shall embrace the name and location of each establishment; character of organization, whether individual, cooperative, or other form; date of commencement of operations; character of business or kind of goods manufactured; amount of capital invested; number of proprietors, firm members, copartners, or officers, and the amount of their salaries; number of employees, and the amount of their wages; quantity and cost of materials used in manufactures; amount of miscellaneous expenses; quantity and value of products; time in operation during the census year; character and quantity of power used; and character and number of machines employed."

In each of the above particulars the requirements of the law have been observed, but certain of the data thus elicited are reserved for publication in the final volumes.

There were 17 cities and towns in the state withdrawn from the enumerators and their manufacturing statistics collected by special agents, in accordance with the further provision of section 7 of the Census Act. Wherever the phrase "urban manufactures" is used in this bulletin, it applies only to those cities and towns which were withdrawn from the enumerators and committed to special agents, and only to the manufacturing establishments within the corporate limits of such places.

Four cities in Georgia contain a population exceeding 20,000 each: Atlanta, Augusta, Macon, and Savannah. The manufacturing statistics of these 4 cities are presented by specified industries and in comparison with the returns of the Eleventh Census.

Mr. T. H. Martin, secretary of the Chamber of Com-

merce of Atlanta, rendered valuable assistance in the preparation of the text for the accompanying report.

The statistics of Georgia are presented in 9 tables: Table 1 showing comparative figures at the several censuses; Table 2 showing all the industries divided between the hand trades and the manufactures proper, and also the statistics of 1 governmental establishment, 1 eleemosynary institution, and establishments with a product of less than \$500, which three latter classes were not reported at previous censuses; Table 3 showing the statistics of the 9 leading industries of the state for 1890 and 1900; Table 4 showing the totals for the cities of Atlanta, Augusta, Macon, and Savannah at the censuses of 1890 and 1900; Table 5 showing the urban manufactures of the state in comparison with the totals for the entire state and the state exclusive of the cities and towns withdrawn from the enumerators; Table 6 showing the statistics for the state by counties; Table 7 showing the statistics for the state by specified industries; Table 8 showing the statistics for the cities of Atlanta, Augusta, Macon, and Savannah by specified industries; and Table 9 showing the totals for all industries in each of the cities and towns withdrawn from the enumerators (exclusive of those shown in Table 8).

Table 1 shows the growth of manufactures in Georgia for the half century which terminates with the Twelfth Census. The manufacturing statistics of the censuses prior to 1850 were too imperfect and fragmentary in character to make it proper to reproduce them in such a table as a measure of industrial growth in the first half of the century. Owing to changes in the method of taking the census, comparisons between the earlier and later decades, represented in Table 1, should be drawn only in the most general way. Nevertheless, the rate of growth in Georgia manufactures may be fairly inferred from the figures given.

In drafting the schedules of inquiry for the census of 1900 care was taken to preserve the basis of comparison with prior censuses. Comparison may be made safely with

respect to all the items of inquiry except those relating to capital, salaried officials, clerks, etc., and their salaries, the average number of employees, and the total amount of wages paid. Live capital, that is, cash on hand, bills receivable, unsettled ledger accounts, raw materials, stock in process of manufacture, finished products on hand, and other sundries, was first called for at the census of 1890. No definite attempt was made, prior to the census of 1890, to secure a return of live capital invested.

Changes were made in the inquiries relating to employees and wages in order to eliminate defects found to exist on the form of inquiry adopted in 1890. At the census of 1890 the average number of persons employed during the entire year was called for, and also the average number employed at stated weekly rates of pay, and the average number was computed for the actual time the establishments were reported as being in operation. At the census of 1900 the greatest and least numbers of employees were reported, and also the average number employed during each month of the year. The average number of wage-earners (men, women, and children) employed during the entire year was ascertained by using 12, the number of calendar months, as a divisor into the total of the average numbers reported for each month. This difference in the method of ascertaining the average number of wage-earners during the entire year may have resulted in a variation in the number, and should be considered in making comparisons.

At the census of 1890 the number and salaries of proprietors and firm members actively engaged in the business or in supervision were reported, combined with clerks and other officials. In cases where proprietors and firm members were reported without salaries, the amount that would ordinarily be paid for similar services was estimated. At the census of 1900 only the number of proprietors and firm members actively engaged in the industry or in supervision was ascertained, and no salaries were reported for this class. It is therefore impossible to compare the number and salaries of salaried officials of any character for the two censuses.

Furthermore, the schedules for 1890 included in the wage-earning class, overseers, foremen, and superintendents (not general superintendents or managers), while the census of 1900 separates from the wage-earning class such salaried employees as general superintendents, clerks, and salesmen. It is possible and probable that this change in the form of the question has resulted in eliminating from the wage-earners, as reported by the present census, many high-salaried employees included in that group for the census of 1890.

In some instances, the number of proprietors and firm members, shown in the accompanying tables, falls short of the number of establishments reported. This is accounted for by the fact that no proprietors or firm members are reported for corporations or cooperative establishments. The number of salaried officials, clerks, etc., is the greatest number reported employed at any one time during the year. For the cotton-ginning industry, this number may appear excessive as compared with the amount

of salaries paid; but allowance should be made for the fact that a considerable number of clerks are employed for only a part of the year; consequently the amount they receive would be small if reckoned as an annual salary.

The reports show a capital of \$89,789,656 invested in manufactures and mechanical industries in the 7,504 establishments reporting for the state of Georgia. This sum represents the value of land, buildings, machinery, tools, and implements, and the live capital utilized, but does not include the capital stock of any of the manufacturing corporations of the state of Georgia. The value of the products is returned at \$106,654,527, to produce which involved an outlay of \$3,354,946 for salaries of officials, clerks, etc., \$20,290,071 for wages, \$5,321,380 for miscellaneous expenses, including rent, taxes, etc., and \$58,232,202 for materials used, mill supplies, freight, and fuel. It is not to be assumed, however, that the difference between the aggregate of these sums and the value of the products is, in any sense, indicative of the profits in the manufacture of the products during the census year. The census schedule takes no cognizance of the cost of selling manufactured articles, or of interest on capital invested, or of the mercantile losses incurred in the business, or of depreciation in plant. The value of the product given is the value as obtained or fixed at the shop or factory. This statement is necessary in order to avoid erroneous conclusions from the figures presented.

The value of products for the state of Georgia, \$106,654,527, is the gross value, and not the net or true value. The difference between these two should be carefully noted. The gross value is found by adding the values of products in the separate establishments. But the finished product of one establishment is often the raw material for another. In such cases the value of the former reappears in the latter, and thus the original cost of certain materials may be included several times in the gross value. The net or true value is found by subtracting from the gross value the value of all materials purchased in a partly manufactured form. In this way the duplications in the gross value are eliminated.

At the census of 1890 the schedule was so framed that it was impossible to find the net or true value. In the present census the schedule asked for the value of the materials in two classes, those purchased in the crude state and those purchased in the partly manufactured form. From the answers to these questions the net or true value of products may be computed. Thus, for Georgia, the gross value of products for 1900 was \$106,654,527. The value of materials purchased in a partly manufactured form was \$28,499,916. The difference, \$78,154,611, is the net or true value of products, and represents the increase in the value of raw materials resulting from the various processes of manufacture.

Very respectfully,



Chief Statistician for Manufactures.

GEORGIA.

Table 1 shows the manufacturing and mechanical industries of the state of Georgia as returned at the censuses of 1850 to 1900, inclusive, with the percentages of increase for each decade. This table also presents the average number of wage-earners employed by manufac-

turing establishments, in comparison with the total population of the state, and the value of the land and buildings owned and reported by manufacturers as capital, in comparison with the assessed value of all real estate and improvements.

TABLE 1.—COMPARATIVE SUMMARY, 1850 TO 1900, WITH PER CENT OF INCREASE FOR EACH DECADE.

| | DATE OF CENSUS. | | | | | | PER CENT OF INCREASE. | | | | |
|---|-----------------|---------------|---------------|---------------|---------------|---------------|-----------------------|--------------|--------------|--------------|--------------|
| | 1900 | 1890 | 1880 | 1870 | 1860 | 1850 | 1890 to 1900 | 1880 to 1890 | 1870 to 1880 | 1860 to 1870 | 1850 to 1860 |
| Number of establishments | 7,504 | 4,285 | 3,503 | 3,836 | 1,890 | 1,522 | 75.1 | 19.3 | 16.8 | 103.0 | 24.2 |
| Capital | \$89,789,656 | \$56,921,580 | \$20,672,410 | \$13,930,125 | \$10,890,875 | \$5,456,483 | 57.7 | 175.4 | 48.4 | 27.9 | 99.6 |
| Salaried officials, clerks, etc., number | 4,203 | 24,085 | (3) | (3) | (3) | (3) | 2.9 | | | | |
| Salaries | \$1,851,946 | \$2,688,200 | (3) | (3) | (3) | (3) | 24.8 | | | | |
| Wage-earners, average number | 83,842 | 52,298 | 24,875 | 17,871 | 11,575 | 8,368 | 110.2 | 39.2 | 54.4 | 38.3 | |
| Total wages | \$20,290,071 | \$14,623,096 | \$5,266,152 | \$4,844,508 | \$2,925,148 | \$1,709,664 | 98.7 | 177.7 | 8.7 | 65.6 | 71.1 |
| Men, 16 years and over | 66,540 | 42,779 | 18,937 | 15,078 | 9,492 | 6,650 | 55.5 | 128.9 | 25.6 | 58.8 | 42.7 |
| Wages | \$17,582,519 | \$12,976,291 | (3) | (3) | (3) | (3) | 85.5 | | | | |
| Women, 16 years and over | 10,929 | 6,998 | 3,610 | 1,498 | 2,083 | 1,718 | 82.2 | 65.7 | 141.6 | 128.1 | 21.2 |
| Wages | \$2,015,852 | \$1,285,806 | (3) | (3) | (3) | (3) | 55.2 | | | | |
| Children, under 16 years | 6,378 | 3,521 | 2,310 | 1,295 | (3) | (3) | 81.0 | 51.8 | 79.1 | | |
| Wages | \$691,700 | \$348,890 | (3) | (3) | (3) | (3) | 98.3 | | | | |
| Miscellaneous expenses | \$5,321,330 | \$1,019,539 | (4) | (4) | (4) | (4) | 32.4 | | | | |
| Cost of materials used | \$58,232,292 | \$35,774,480 | \$21,143,939 | \$18,553,781 | \$9,986,532 | \$3,401,917 | 62.8 | 48.2 | 29.9 | \$6.1 | 193.8 |
| Value of products, including custom work and repairing | \$106,654,527 | \$68,917,020 | \$36,440,948 | \$31,196,115 | \$16,925,564 | \$7,082,075 | 54.8 | 89.1 | 16.8 | 84.3 | 189.0 |
| Total population | 2,216,331 | 1,887,353 | 1,542,180 | 1,184,109 | 1,057,236 | 906,185 | 20.6 | 19.1 | 30.2 | 12.0 | 16.7 |
| Wage-earners engaged in manufactures | 83,842 | 52,298 | 24,875 | 17,871 | 11,575 | 8,368 | 60.3 | 110.2 | 39.2 | 54.4 | 38.3 |
| Per cent of total population | 3.8 | 2.8 | 1.6 | 1.5 | 1.1 | 0.9 | | | | | |
| Assessed value of real estate | \$184,336,134 | \$225,054,915 | \$139,988,941 | \$143,948,216 | \$179,801,441 | \$121,619,739 | 93.0 | 60.8 | 12.8 | 139.9 | 47.8 |
| Value of land and buildings invested in manufactures ⁵ | \$24,283,038 | \$17,106,773 | (3) | (3) | (3) | (3) | 41.9 | | | | |
| Per cent of assessed value | 5.6 | 7.6 | | | | | | | | | |

¹ Decrease.

² Includes proprietors and firm members, with their salaries; number only reported in 1900. (See Table 7.)

³ Not reported separately.

⁴ Not reported.

⁵ As given in the Report of the Comptroller-General of the State of Georgia for 1900, page 4.

⁶ Does not include value of rented property.

Although Georgia is an agricultural state, Table 1 shows that there has been a steady growth in its manufacturing and mechanical industries during the half century. The population during these years increased from 906,185 to 2,216,331, or 144.6 per cent, but the average number of wage-earners employed in manufacturing establishments increased from 8,368 to 83,842, or 901.9 per cent, embracing, in 1900, 3.8 per cent of the entire population, compared with nine-tenths of 1 per cent in 1850. Probably the best indication of the importance of the wage-earning class is afforded by the greatest number employed at any one time during the year. In 1900 this was 111,239, or 5 per cent of the total population of the state.

A distinct advance in manufactures has marked each decennial period—even that between the years 1860 and 1870—of the state's history. A great impetus was given to manufacturing by the cotton exposition held at Atlanta in 1881. It was the first exhibition of the kind in the Southern states, and the first in the country after the Centennial Exposition at Philadelphia, by which it seems to have been suggested. The increasing interest in manual training and technical education since 1887 has also con-

tributed to the growth of Georgia's manufactures. The Georgia Institute of Technology was opened to students in 1887. Its graduates are actively engaged in manufacturing of various kinds with marked success. It is noteworthy that the increase in value of products was greatest—\$37,737,507—during the decade ending with the census year 1900.

Table 1 shows that during the last decade the increase in percentage of women, and of children under 16 years of age, among wage-earners, was larger than that of men. In the absence of legislation regulating child labor, all the cotton manufacturers in the state have signed an agreement to exclude from the mills children under 10 years of age, and those under 12 who can not show a certificate of 4 months' attendance at school.

Table 2 divides the industries of the state between the hand trades and the manufactures proper. This table also gives the statistics for 1 governmental establishment, 1 eleemosynary institution, and establishments with a product of less than \$500; these were not reported at previous censuses, and therefore are omitted from the other tables and their use confined to Table 2.

TABLE 2.—SUMMARY FOR ALL ESTABLISHMENTS.

| CLASSES. | Number of establishments. | Capital. | Proprietors and firm members. | WAGE-EARNERS. | | Miscellaneous expenses. | COST OF MATERIALS USED. | | | | Value of products, including custom work and repairing. |
|--|---------------------------|--------------|-------------------------------|-----------------|--------------|-------------------------|-------------------------|-------------------------|---|---------------------|---|
| | | | | Average number. | Total wages. | | Total. | Purchased in raw state. | Purchased in partially manufactured form. | Fuel, freight, etc. | |
| Total | 13,176 | \$92,315,737 | 15,147 | 91,547 | \$20,464,456 | \$5,382,817 | \$58,539,684 | \$26,702,668 | \$28,741,907 | \$3,095,109 | \$107,867,052 |
| Hand trades ¹ | 1,681 | 1,713,164 | 1,888 | 8,822 | 1,817,016 | 243,539 | 2,778,299 | 2,950 | 2,703,392 | 71,957 | 5,822,990 |
| Governmental establishment | 1 | 125 | 1 | 1 | 510 | 29 | 29 | 24 | 24 | 6 | 569 |
| Eleemosynary institution | 1 | 1,200 | 1 | 1 | 150 | — | 2,415 | 2,400 | 15 | — | 2,800 |
| Establishments with a product of less than \$500 | 5,670 | 2,524,756 | 6,319 | 7,703 | 173,695 | 61,487 | 395,038 | 63,086 | 241,952 | — | 1,209,156 |
| All other establishments | 5,373 | 88,076,492 | 6,990 | 80,020 | 18,973,955 | 5,077,791 | 55,453,903 | 26,634,232 | 25,796,524 | 3,023,147 | 100,831,537 |

¹ Includes bicycle and tricycle repairing, 58; blacksmithing and wheelwrighting, 621; boots and shoes, custom work and repairing, 169; carpentering, 87; clothing, men's, custom work and repairing, 73; clothing, women's, dressmaking, 89; dyeing and cleaning, 24; furniture, cabinetmaking, repairing, and upholstering, 42; lock and gun smithing, 19; masonry, brick and stone, 30; millinery, custom work, 131; painting, house, sign, etc., 47; paper hanging, 5; plumbing, and gas and steam fitting, 56; sewing machine repairing, 4; typewriter repairing, 3; watch, clock, and jewelry repairing, 123.

Of the 13,176 establishments of all classes, shown in this table, 7,301, or 55.4 per cent, were small shops included in the groups of "hand trades" and "establishments with a product of less than \$500." The value of the products of these establishments, consisting principally of the sums received for custom work and repairing,

amounted to \$7,032,146, or only 6.5 per cent of the total products of the state.

In addition to the 13,176 active establishments in the state during the census year, with a capital of \$92,315,737, shown in Table 2, there were 103 idle establishments, with a capital of \$1,117,076, divided as follows:

| INDUSTRIES. | Number of idle establishments. | Capital. | INDUSTRIES. | Number of idle establishments. | Capital. |
|---|--------------------------------|----------|--|--------------------------------|-----------|
| Brick and tile | 7 | \$5,907 | Iron and steel | 8 | \$599,300 |
| Chemicals | 1 | 150,000 | Kaolin and other earth grinding | 1 | 29,000 |
| Cotton ginning | 40 | 26,782 | Lumber and timber products | 28 | 81,539 |
| Fertilizers | 1 | 82,500 | Lumber, planing mill products, including sash, doors, and blinds | 1 | 25,000 |
| Flouring and grist mill products | 7 | 7,965 | Paving and paving materials | 2 | 10,176 |
| Foundry and machine shop products | 1 | 44,000 | Roofing and roofing materials | 1 | 54,500 |
| Fruits and vegetables, canning and preserving | 1 | 9,100 | All other industries | 7 | 12,337 |
| Hosiery and knit goods | 1 | 25,000 | | | |
| Ice, artificial | 1 | 4,000 | | | |

TABLE 3.—COMPARATIVE SUMMARY OF NINE LEADING INDUSTRIES.

| INDUSTRIES. | Year. | Number of establishments. | Capital. | WAGE-EARNERS. | | Miscellaneous expenses. | Cost of materials used. | Value of products, including custom work and repairing. |
|---|-------|---------------------------|--------------|-----------------|--------------|-------------------------|-------------------------|---|
| | | | | Average number. | Total wages. | | | |
| Total for selected industries for state | 1900 | 3,301 | \$61,341,596 | 61,170 | \$14,059,303 | \$2,731,378 | \$41,893,194 | \$72,715,638 |
| | 1890 | 1,673 | 33,425,143 | 31,494 | 8,561,345 | 1,992,578 | 24,060,378 | 41,703,950 |
| Increase, 1890 to 1900 | | 1,628 | 22,916,453 | 26,676 | 5,497,958 | 738,800 | 17,832,816 | 30,951,743 |
| Per cent of increase | | 97.3 | 59.6 | 77.3 | 64.2 | 37.1 | 74.1 | 74.1 |
| Per cent of total of all industries in state | 1900 | 44.0 | 68.3 | 73.0 | 69.3 | 51.3 | 71.9 | 68.2 |
| | 1890 | 39.0 | 67.5 | 66.0 | 58.5 | 49.6 | 67.3 | 60.6 |
| Cars and general shop construction and repairs by steam railroad companies. | 1900 | 32 | 1,408,592 | 3,175 | 1,002,298 | 89,380 | 1,272,692 | 3,062,238 |
| | 1890 | 11 | 450,512 | 906 | 522,657 | — | 349,844 | 892,610 |
| Fertilizers | 1900 | 41 | 6,663,618 | 1,126 | 294,887 | 405,936 | 2,349,635 | 3,367,358 |
| | 1890 | 44 | 5,501,851 | 1,204 | 326,011 | 468,599 | 3,098,883 | 5,026,034 |
| Flouring and grist mill products | 1900 | 1,123 | 2,504,093 | 1,167 | 225,933 | 73,455 | 7,004,095 | 8,330,439 |
| | 1890 | 719 | 2,347,835 | 1,078 | 197,964 | 103,985 | 4,356,700 | 5,190,311 |
| Foundry and machine shop products | 1900 | 87 | 3,398,141 | 2,384 | 920,331 | 173,903 | 1,590,834 | 3,506,427 |
| | 1890 | 52 | 2,107,969 | 1,632 | 732,301 | 124,362 | 753,299 | 2,272,653 |
| Lumber and timber products | 1900 | 1,254 | 11,802,716 | 10,240 | 2,344,523 | 249,636 | 6,665,897 | 13,704,923 |
| | 1890 | 449 | 5,019,635 | 5,943 | 1,533,217 | 223,279 | 3,304,249 | 6,545,195 |
| Lumber, planing mill products, including sash, doors, and blinds | 1900 | 99 | 2,074,226 | 2,171 | 672,243 | 102,159 | 2,280,495 | 4,302,976 |
| | 1890 | 82 | 1,677,880 | 2,157 | 851,290 | 126,193 | 1,907,370 | 3,548,972 |
| Oil, cottonseed and cake | 1900 | 48 | 4,098,668 | 1,691 | 354,017 | 312,986 | 6,229,426 | 8,064,112 |
| | 1890 | 17 | 932,131 | 751 | 145,557 | 86,843 | 1,289,421 | 1,670,136 |
| Turpentine and rosin | 1900 | 524 | 3,785,432 | 19,199 | 3,772,848 | 178,774 | 2,292,665 | 8,110,468 |
| | 1890 | 228 | 2,242,592 | 9,889 | 1,998,186 | 108,003 | 1,001,686 | 4,242,255 |

TABLE 3.—COMPARATIVE SUMMARY OF NINE LEADING INDUSTRIES—Continued.

| INDUSTRIES. | Year. | Number of establishments. | Capital. | WAGE-EARNERS. | | Miscellaneous expenses. | Cost of materials used. | Value of products, including custom work and repairing. |
|---|--------------|---------------------------|----------------------------|------------------|--------------------------|-------------------------|---------------------------|---|
| | | | | Average number. | Total wages. | | | |
| Textiles: | | | | | | | | |
| Total | 1900 1890 | 98 71 | \$25,606,170 18,084,708 | 20,117 10,814 | \$3,872,318 2,264,162 | \$1,145,149 746,814 | \$12,207,425 7,998,926 | \$20,266,712 12,376,724 |
| Cotton goods (including cotton small wares) | 1900 1890 | 68 58 | 24,222,169 17,664,675 | 18,348 10,814 | 3,574,492 2,167,036 | 1,050,088 724,822 | 11,169,700 7,832,230 | 18,544,910 12,085,629 |
| Hosiery and knit goods | 1900 1890 | 16 4 | 928,887 121,494 | 1,208 338 | 200,662 64,092 | 72,631 10,605 | 757,430 70,697 | 1,230,801 166,850 |
| Woolen goods | 1900 1890 | 14 14 | 455,114 298,539 | 561 162 | 97,159 28,034 | 22,430 10,887 | 280,295 95,999 | 491,001 173,245 |

The 9 leading industries of the state in 1900, as shown in Table 3, embraced 3,301 establishments, or 44 per cent of the total number in the state; used a capital of \$61,341,596, or 68.3 per cent of the total; gave employment to 61,170 wage-earners, or 73 per cent of the total number; and paid \$14,059,308, or 69.3 per cent of the total wages. The value of their products was \$72,715,693, or 68.2 per cent of the total. In the discussion of Table 3 which follows, these industries are ranked with reference to the value of their products.

Table 3 shows that the manufacture of cotton goods is the most important industry in the state. The 68 establishments reported in 1900 gave employment to 18,348 wage-earners, or 21.9 per cent of the wage-earners employed in the state, and their products were valued at \$18,544,910, or 17.4 per cent of the total value of the products of the state. In 1890 there were 58 establishments reported, with 10,814 wage-earners, and products valued at \$12,085,629. The increase in the value of products during the decade was \$6,509,281, or 54.1 per cent.

The growth of the cotton manufactures in Georgia has attracted the attention of the whole country. Stimulated in the first instance by abundant raw material, it has also in some instances been encouraged by municipal exemption from taxation, while railroad companies, chambers of commerce, and other agencies have done much to attract capital to the industry from a distance. Cotton manufacturers of Massachusetts, New York, and Pennsylvania are now represented in the state by large mills recently constructed in Floyd and Polk counties, within a radius of 10 miles. Home capital also has been attracted by the profits of the industry, and by the salutary effect of the distribution of wages through the channels of trade. Cotton factories have benefited the farmers by providing a strong local market for cotton and a better demand for farm products, and, therefore, farmers are joining the business men as subscribers for the capital stock of the new corporations.

Another industry dependent upon the large cotton crop of the region is the manufacture of cottonseed oil and cake. There were 43 establishments engaged in this industry in 1900, with 1,591 wage-earners, and products valued at \$8,064,112. In 1890 there were 17 establishments reported, with 751 wage-earners, and products valued at \$1,670,196.

The increase in the value of products during the decade was \$6,393,916, or 382.8 per cent. The products of these mills include cottonseed meal, as well as oil and cake. Much of this meal is sold for the manufacture of fertilizers and used for this purpose by the mills themselves. A comparison of the products of these mills with the products of the cotton factories of the state indicates that the seed of the cotton plant contributes to the total value of products nearly one-half as much as the fiber.

Next in importance to cotton manufacturing is the manufacture of lumber and timber products. There were 1,254 establishments engaged in this industry in 1900, with 10,240 wage-earners, and products valued at \$13,704,923. In 1890 there were 449 establishments reported, with 5,943 wage-earners, and products valued at \$6,545,195. The increase in the value of products during the decade was \$7,159,728, or 109.4 per cent. Long-leaf pine forests cover a considerable portion of the land surface in 80 counties, and lumber made from these trees finds a market in most of the states east of the Mississippi River, as well as in South America, the West Indies, and various parts of Europe.

Dependent also upon the forests of the state is the manufacture of turpentine and rosin. There were 524 establishments engaged in this industry in 1900, with 19,199 wage-earners, and products valued at \$8,110,468. In 1890 there were 228 establishments reported, with 9,889 wage-earners, and products valued at \$4,242,255. The increase in the value of products during the decade was \$3,868,213, or 91.2 per cent. The value of the manufactured products of the forests of Georgia in 1900, including lumber and timber products and turpentine and rosin, was \$21,815,391. This exceeds the value of cotton goods, but is less than the value of all the manufactured products of the cotton plant, including cottonseed oil and cake, which was \$26,609,022. Thus the forests rank next to the cotton plant in their supply of raw material for the manufacturing industries of the state. By a system of forestry it is believed that the pine regions might be made to yield indefinitely. Whenever the sawmill has been in operation a few years the land is practically denuded of timber. The destruction is made more complete by the operations of turpentine farmers, who box and drain the sap of young trees which

would not be worth hauling to a sawmill, and by disastrous forest fires. Under these conditions, industries dependent upon the forests seem doomed to early extinction.

There were 1,123 establishments engaged in flour and grist milling in 1900, with 1,167 wage-earners, and products valued at \$8,390,439. In 1890 there were 719 establishments reported, with 1,078 wage-earners, and products valued at \$5,190,311. The increase in the value of products during the decade was \$3,140,128, or 60.5 per cent. For some years the flouring and grist mills in Georgia felt very strongly the competition of large western establishments, but the wheat crop of the state is increasing, and within the past decade several costly plants have been erected.

There were 99 establishments engaged in the planing-mill industry in 1900, with 2,171 wage-earners, and products valued at \$4,302,976. In 1890 there were 82 establishments reported, with 2,157 wage-earners, and products valued at \$3,548,972. The increase in the value of products during the decade was \$754,004, or 21.2 per cent.

There were 87 establishments engaged in the foundry and machine shop industry in 1900, with 2,384 wage-earners, and products valued at \$3,506,427. In 1890 there were 52 establishments reported, with 1,632 wage-earners, and products valued at \$2,272,653. The increase in the value of products during the decade was \$1,233,774, or 54.3 per cent.

There were 41 establishments engaged in the manufacture of fertilizers in 1900, with 1,126 wage-earners, and products valued at \$3,367,353. In 1890 there were 44 establishments reported, with 1,264 wage-earners, and products valued at \$5,026,034. The decrease in the value

of products during the decade, \$1,658,681, or 33 per cent, is due to the lower price of commercial fertilizers in 1900, and to the fact that farmers bought fertilizing materials and mixed them at home.

There were 32 establishments engaged in the construction and repair shop work of steam railroads in 1900, with 3,175 wage-earners, and products valued at \$3,062,283. In 1890 there were 11 establishments reported, with 966 wage-earners, and products valued at \$892,610. The increase in the value of products during the decade was \$2,169,673, or 243.1 per cent. This increase reflects the improvement of the railroads, for in 1894 three-fourths of the mileage of the state was in the hands of receivers.

There were 16 establishments engaged in the manufacture of hosiery and knit goods in 1900, with 1,208 wage-earners, and products valued at \$1,230,801. In 1890 there were 4 establishments reported, with 338 wage-earners, and products valued at \$166,850. The increase in the value of products during the decade was \$1,063,951, or 637.7 per cent.

There were 14 establishments engaged in the manufacture of woolen goods in 1900, with 561 wage-earners, and products valued at \$491,001. In 1890 there were 14 establishments reported, with 162 wage-earners, and products valued at \$173,245. The increase in value of products during the decade was \$317,756, or 183.4 per cent.

URBAN MANUFACTURES.

Table 4 shows the totals for the manufacturing and mechanical industries of the cities of Atlanta, Augusta, Macon, and Savannah as returned at the censuses of 1890 and 1900, with the percentages of increase.

TABLE 4.—COMPARATIVE SUMMARY, ATLANTA, AUGUSTA, MACON, AND SAVANNAH, 1890 AND 1900, WITH PER CENT OF INCREASE.

| | Year. | Number of establishments. | Capital. | WAGE-EARNERS. | | Miscellaneous expenses. | Cost of materials used. | Value of products, including custom work and repairing. |
|--|-------|---------------------------|--------------|-----------------|--------------|-------------------------|-------------------------|---|
| | | | | Average number. | Total wages. | | | |
| The State..... | 1900 | 7,504 | \$39,789,656 | 83,842 | \$20,290,071 | \$5,321,899 | \$58,232,202 | \$106,654,527 |
| | 1890 | 4,285 | 56,921,530 | 52,298 | 14,623,906 | 4,019,539 | 35,774,480 | 68,917,020 |
| Per cent of increase..... | | 75.1 | 57.7 | 60.3 | 38.7 | 32.4 | 62.8 | 54.3 |
| Atlanta..... | 1900 | 395 | 16,085,114 | 9,368 | 3,106,039 | 1,352,721 | 8,571,194 | 16,721,599 |
| | 1890 | 410 | 9,508,962 | 7,957 | 3,206,285 | 987,623 | 5,914,571 | 13,074,037 |
| Per cent of increase..... | | 13.7 | 69.2 | 17.7 | 13.1 | 37.0 | 44.9 | 27.9 |
| Augusta..... | 1900 | 388 | 9,016,619 | 7,138 | 1,815,879 | 618,938 | 6,244,286 | 10,069,750 |
| | 1890 | 440 | 7,770,688 | 5,714 | 1,689,941 | 526,539 | 5,430,871 | 9,244,850 |
| Per cent of increase..... | | 11.8 | 16.0 | 24.9 | 7.5 | 17.5 | 15.0 | 8.9 |
| Macon..... | 1900 | 182 | 5,076,005 | 3,700 | 1,047,437 | 445,078 | 3,741,167 | 6,495,767 |
| | 1890 | 203 | 3,988,900 | 3,157 | 1,057,041 | 219,988 | 2,661,498 | 5,171,530 |
| Per cent of increase..... | | 10.3 | 27.3 | 17.2 | 10.9 | 102.3 | 40.4 | 25.6 |
| Savannah..... | 1900 | 155 | 5,716,491 | 2,870 | 1,176,150 | 469,918 | 3,915,884 | 6,461,816 |
| | 1890 | 241 | 5,379,774 | 2,419 | 1,059,348 | 484,497 | 3,297,801 | 6,319,066 |
| Per cent of increase..... | | 36.5 | 6.3 | 18.6 | 11.0 | 13.0 | 18.7 | 2.3 |
| Total for 4 cities..... | 1900 | 1,120 | 35,894,229 | 23,076 | 7,145,505 | 2,886,655 | 22,472,531 | 39,749,232 |
| | 1890 | 1,297 | 26,648,324 | 19,247 | 7,012,615 | 2,218,647 | 17,307,744 | 33,800,483 |
| Per cent of increase..... | | 13.6 | 34.7 | 19.9 | 1.9 | 30.1 | 29.8 | 17.6 |
| Per cent of 4 cities to total for state..... | 1900 | 14.9 | 40.0 | 27.5 | 35.2 | 54.2 | 38.6 | 37.3 |
| | 1890 | 30.3 | 46.3 | 36.8 | 48.0 | 55.2 | 48.4 | 49.1 |

¹ Decrease.

It appears from Table 4 that there has been a considerable increase during the past decade in the manufactures of these cities. The average number of wage-earners increased from 19,247 to 23,076, or 19.9 per cent, and the value of products from \$33,809,483 to \$39,749,232, or 17.6 per cent, while the number of establishments decreased from 1,297 to 1,120, or 13.6 per cent. The increase in the number of wage-earners and in the value of products has been much smaller in these 4 cities than in the state as a whole. Atlanta, the leading manufacturing city of the state, shows the most rapid growth, the value of products having increased from \$13,074,037 in 1890 to \$16,721,899 in 1900, or 27.9 per cent. The average num-

ber of wage-earners increased from 7,957 to 9,368, or 17.7 per cent, but the number of establishments decreased from 410 to 395, or 3.7 per cent. The number of establishments, number of wage-earners, and value of products for this city constituted 5.3, 11.2, and 15.7 per cent, respectively, of the totals for the entire state.

Table 5 presents the totals for the manufacturing industries of the 17 cities and towns withdrawn from the enumerators, places them in comparison with the totals for the entire state and the state exclusive of these cities and towns, and shows their rank in population, and in value of products.

TABLE 5.—URBAN MANUFACTURES.

| | Number of establishments. | Capital. | Proprietors and firm members. | WAGE-EARNERS. | | Miscellaneous expenses. | Cost of materials used. | PRODUCTS. | | | POPULATION. | | |
|--|---------------------------|--------------|-------------------------------|-----------------|--------------|-------------------------|-------------------------|---------------|-------|--------------------|-------------|-------|--------------------|
| | | | | Average number. | Total wages. | | | Value. | Rank. | Per cent of total. | Total. | Rank. | Per cent of total. |
| Total for state..... | 7,504 | \$89,789,656 | 8,828 | 83,842 | \$20,290,071 | \$5,321,330 | \$58,232,202 | \$106,651,527 | 100.0 | | 2,216,331 | | 100.0 |
| Total for urban manufactures..... | 1,788 | 50,263,578 | 1,832 | 35,780 | 10,295,982 | 3,723,930 | 32,300,640 | 56,921,346 | 53.4 | | 292,333 | | 13.2 |
| Americus..... | 57 | 455,056 | 61 | 585 | 210,047 | 27,701 | 327,672 | 694,511 | 15 | 0.7 | 7,674 | 8 | 0.3 |
| Athens..... | 71 | 804,190 | 73 | 851 | 176,758 | 42,289 | 557,261 | 958,722 | 11 | 0.9 | 10,245 | 6 | 0.5 |
| Atlanta..... | 395 | 16,085,114 | 391 | 9,368 | 3,106,039 | 1,352,721 | 8,571,194 | 16,721,899 | 1 | 15.7 | 89,872 | 1 | 4.1 |
| Augusta..... | 383 | 9,016,619 | 390 | 7,138 | 1,815,879 | 614,985 | 6,244,286 | 10,069,750 | 2 | 9.4 | 39,441 | 3 | 1.8 |
| Barnesville..... | 18 | 631,683 | 17 | 578 | 119,623 | 23,177 | 606,524 | 1,033,749 | 10 | 1.0 | 3,036 | 17 | 0.1 |
| Brunswick..... | 73 | 423,826 | 76 | 550 | 247,516 | 39,144 | 551,817 | 1,171,378 | 8 | 1.1 | 9,081 | 7 | 0.4 |
| Cartersville..... | 40 | 132,523 | 49 | 124 | 23,890 | 5,684 | 73,083 | 160,715 | 17 | 0.1 | 3,135 | 16 | 0.1 |
| Columbus..... | 135 | 5,690,832 | 152 | 4,814 | 1,201,320 | 409,320 | 3,534,213 | 6,039,799 | 5 | 5.7 | 17,614 | 5 | 0.8 |
| Dalton..... | 40 | 776,504 | 62 | 838 | 144,745 | 30,918 | 1,043,269 | 1,489,412 | 7 | 1.4 | 4,315 | 14 | 0.2 |
| Gainesville..... | 50 | 317,775 | 65 | 544 | 182,657 | 18,325 | 466,952 | 788,221 | 14 | 0.7 | 4,382 | 13 | 0.2 |
| Griffin..... | 29 | 1,407,562 | 28 | 1,021 | 229,790 | 44,981 | 561,874 | 1,079,133 | 9 | 1.0 | 6,857 | 10 | 0.3 |
| La Grange..... | 30 | 978,366 | 28 | 716 | 133,158 | 38,493 | 468,372 | 792,038 | 12 | 0.7 | 4,274 | 12 | 0.2 |
| Macon..... | 182 | 5,076,005 | 173 | 3,700 | 1,047,437 | 445,073 | 3,741,167 | 6,495,767 | 8 | 6.1 | 23,272 | 4 | 1.1 |
| Marietta..... | 34 | 698,134 | 35 | 683 | 180,157 | 37,996 | 386,114 | 704,959 | 13 | 0.7 | 4,416 | 11 | 0.2 |
| Newnan..... | 27 | 824,721 | 27 | 456 | 102,567 | 43,451 | 403,963 | 679,139 | 16 | 0.6 | 3,654 | 15 | 0.2 |
| Rome..... | 64 | 1,328,118 | 58 | 944 | 248,249 | 75,793 | 857,990 | 1,570,273 | 6 | 1.5 | 7,291 | 9 | 0.3 |
| Savannah..... | 155 | 5,716,491 | 157 | 2,870 | 1,176,150 | 469,918 | 3,915,384 | 6,461,816 | 4 | 6.1 | 54,244 | 2 | 2.4 |
| Total for state exclusive of urban manufactures..... | 5,716 | 39,526,078 | 6,996 | 48,062 | 9,994,019 | 1,597,400 | 25,931,562 | 49,733,181 | 46.6 | | 1,923,498 | | 86.8 |
| Per cent of urban manufactures to total for state..... | 23.8 | 56.0 | 20.8 | 42.7 | 50.7 | 70.0 | 55.5 | 53.4 | | | 13.2 | | |

Of the 7,504 establishments in the state, 1,788, or 23.8 per cent, were located in these 17 cities and towns. They furnished employment to 35,780 wage-earners, or 42.7 per cent of the total number, and the value of their products, \$56,921,346, formed 53.4 per cent of the total for the state.

Table 6 shows the totals for the state by counties.

Table 7 shows the totals for the state by specified industries.

Table 8 shows the totals for the cities of Atlanta, Augusta, Macon, and Savannah by specified industries.

Table 9 shows the totals for the cities and towns withdrawn from the enumerators, exclusive of those shown in Table 8.

TABLE 6.—MANUFACTURES

| 1 | COUNTRIES. | Number of establishments. | CAPITAL. | | | | | Proprietors and firm members. | SALARIED OFFICIALS, CLERKS, ETC. | | AVERAGE NUMBER OF WAGE-EARNERS AND TOTAL WAGES. | |
|----|---------------|---------------------------|--------------|--------------|--------------|-----------------------------------|--------------------|-------------------------------|----------------------------------|-------------|---|--------------|
| | | | Total. | Land. | Buildings. | Machinery, tools, and implements. | Cash and sundries. | | Number. | Salaries. | Total. | |
| | | | | | | | | | | | Average number. | Wages. |
| | The State | 7,504 | \$89,789,656 | \$10,992,824 | \$13,290,214 | \$32,830,482 | \$32,676,186 | 8,828 | 4,203 | \$3,354,946 | 88,842 | \$20,290,071 |
| 2 | Appling | 76 | 481,718 | 227,495 | 89,238 | 157,580 | 57,405 | 94 | 95 | 14,800 | 829 | 170,593 |
| 3 | Baker | 20 | 69,880 | 24,240 | 7,775 | 18,875 | 18,490 | 24 | 18 | 8,375 | 304 | 67,911 |
| 4 | Baldwin | 39 | 229,480 | 31,000 | 45,855 | 74,710 | 77,915 | 42 | 22 | 18,567 | 200 | 36,986 |
| 5 | Banks | 45 | 54,025 | 16,905 | 7,747 | 24,275 | 5,098 | 54 | 54 | | 71 | 11,535 |
| 6 | Bartow | 76 | 414,517 | 108,497 | 44,540 | 137,061 | 128,819 | 100 | 21 | 12,799 | 270 | 61,271 |
| 7 | Berrien | 91 | 780,026 | 285,748 | 62,519 | 201,988 | 169,771 | 120 | 51 | 25,964 | 1,802 | 291,928 |
| 8 | Bibb | 200 | 5,005,919 | 346,871 | 949,012 | 1,810,211 | 2,499,825 | 192 | 278 | 289,330 | 4,122 | 1,143,615 |
| 9 | Brooks | 45 | 390,015 | 187,038 | 26,740 | 159,216 | 67,021 | 53 | 22 | 15,893 | 685 | 181,979 |
| 10 | Bryan | 25 | 81,415 | 27,187 | 4,894 | 29,691 | 19,673 | 37 | 18 | 5,970 | 894 | 67,741 |
| 11 | Bulloch | 99 | 346,943 | 81,166 | 34,188 | 148,528 | 88,061 | 128 | 55 | 24,105 | 1,475 | 262,839 |
| 12 | Burke | 55 | 162,794 | 10,294 | 84,815 | 89,475 | 28,210 | 62 | 7 | 3,293 | 154 | 31,438 |
| 13 | Butts | 44 | 305,655 | 80,746 | 71,037 | 134,696 | 69,177 | 45 | 10 | 5,960 | 341 | 62,080 |
| 14 | Calhoun | 35 | 113,805 | 23,077 | 12,065 | 60,752 | 17,981 | 42 | 12 | 6,290 | 206 | 87,917 |
| 15 | Camden | 13 | 160,929 | 66,757 | 13,292 | 22,356 | 58,534 | 16 | 31 | 17,385 | 551 | 93,696 |
| 16 | Campbell | 31 | 241,472 | 13,895 | 41,472 | 87,855 | 97,047 | 41 | 14 | 3,350 | 211 | 41,482 |
| 17 | Carroll | 116 | 401,398 | 63,155 | 68,060 | 201,726 | 68,457 | 150 | 16 | 5,658 | 248 | 48,869 |
| 18 | Catoosa | 24 | 25,778 | 3,360 | 6,040 | 13,540 | 2,838 | 28 | 23 | | 83 | 6,950 |
| 19 | Charlton | 10 | 95,687 | 34,162 | 3,025 | 33,600 | 24,900 | 12 | 10 | 3,580 | 820 | 43,670 |
| 20 | Chatham | 170 | 6,415,480 | 706,200 | 1,042,803 | 1,588,946 | 3,082,481 | 174 | 239 | 247,415 | 8,527 | 1,812,872 |
| 21 | Chattahoochee | 14 | 24,432 | 4,232 | 1,800 | 16,800 | 1,550 | 18 | 1 | 240 | 56 | 9,841 |
| 22 | Chattooga | 48 | 1,178,715 | 60,782 | 195,955 | 672,386 | 249,642 | 52 | 41 | 28,211 | 859 | 141,853 |
| 23 | Cherokee | 49 | 177,546 | 61,240 | 14,180 | 54,438 | 47,688 | 60 | 4 | 3,212 | 118 | 27,115 |
| 24 | Clarke | 88 | 1,088,649 | 48,110 | 111,286 | 481,666 | 497,687 | 85 | 47 | 81,231 | 1,166 | 225,370 |
| 25 | Clay | 26 | 114,455 | 8,915 | 13,950 | 44,605 | 46,985 | 27 | 5 | 1,510 | 75 | 13,229 |
| 26 | Clayton | 34 | 49,800 | 3,015 | 9,737 | 29,630 | 6,918 | 39 | | | 60 | 11,421 |
| 27 | Clinch | 50 | 297,685 | 93,251 | 26,427 | 108,647 | 69,860 | 82 | 55 | 23,360 | 1,548 | 287,481 |
| 28 | Cobb | 109 | 1,197,706 | 88,171 | 205,417 | 387,509 | 521,609 | 125 | 59 | 48,679 | 1,195 | 267,027 |
| 29 | Coffee | 63 | 1,231,048 | 600,786 | 77,694 | 877,856 | 174,712 | 92 | 55 | 29,090 | 1,678 | 392,210 |
| 30 | Colquitt | 62 | 1,056,114 | 344,720 | 81,186 | 378,070 | 267,138 | 102 | 82 | 43,614 | 1,425 | 300,937 |
| 31 | Columbia | 17 | 81,629 | 10,591 | 2,140 | 14,870 | 4,028 | 17 | 1 | 260 | 33 | 8,037 |
| 32 | Coweta | 86 | 1,011,076 | 54,502 | 142,010 | 285,644 | 528,920 | 97 | 41 | 29,015 | 649 | 131,224 |
| 33 | Crawford | 33 | 56,365 | 11,410 | 10,620 | 26,070 | 8,265 | 43 | | | 99 | 17,908 |
| 34 | Dade | 23 | 115,396 | 5,660 | 11,715 | 86,255 | 11,766 | 22 | 6 | 4,560 | 74 | 18,183 |
| 35 | Dawson | 31 | 35,865 | 7,970 | 7,215 | 17,896 | 3,285 | 37 | | | 17 | 2,383 |
| 36 | Deatur | 80 | 1,080,867 | 460,517 | 97,780 | 281,826 | 240,744 | 106 | 76 | 42,710 | 2,056 | 407,176 |
| 37 | Dekalb | 50 | 775,294 | 59,905 | 168,289 | 122,910 | 424,180 | 58 | 24 | 84,145 | 423 | 151,187 |
| 38 | Dodge | 43 | 247,418 | 25,325 | 18,740 | 115,373 | 92,980 | 54 | 19 | 14,335 | 447 | 112,700 |
| 39 | Dooly | 59 | 650,910 | 111,090 | 42,540 | 269,618 | 227,632 | 82 | 19 | 8,284 | 830 | 186,422 |
| 40 | Dougherty | 43 | 400,136 | 67,987 | 63,132 | 178,660 | 90,357 | 48 | 35 | 25,334 | 409 | 88,444 |
| 41 | Douglas | 41 | 44,128 | 4,665 | 6,665 | 23,815 | 9,387 | 49 | 6 | 768 | 48 | 8,801 |
| 42 | Early | 53 | 428,480 | 141,515 | 37,605 | 162,545 | 86,815 | 78 | 27 | 18,280 | 785 | 174,804 |
| 43 | Echols | 11 | 77,960 | 42,525 | 6,325 | 14,120 | 14,990 | 16 | 14 | 3,542 | 236 | 51,910 |
| 44 | Effingham | 29 | 208,727 | 97,905 | 14,998 | 101,254 | 35,470 | 37 | 17 | 9,836 | 471 | 95,729 |
| 45 | Elbert | 51 | 460,345 | 47,793 | 63,947 | 218,221 | 136,834 | 61 | 14 | 9,965 | 449 | 75,793 |
| 46 | Emanuel | 58 | 416,662 | 88,043 | 51,123 | 181,369 | 146,127 | 69 | 41 | 20,352 | 1,020 | 198,617 |
| 47 | Fannin | 39 | 90,463 | 9,123 | 17,255 | 29,141 | 84,944 | 42 | 5 | 4,020 | 140 | 52,866 |
| 48 | Fayette | 24 | 57,907 | 26,403 | 7,090 | 23,110 | 1,804 | 35 | | | 31 | 5,125 |
| 49 | Floyd | 137 | 3,198,628 | 241,941 | 771,674 | 980,507 | 1,252,406 | 143 | 94 | 96,425 | 2,229 | 565,952 |
| 50 | Forsyth | 19 | 16,455 | 2,015 | 3,120 | 9,945 | 1,375 | 24 | | | 16 | 2,472 |
| 51 | Franklin | 64 | 111,812 | 11,023 | 26,113 | 65,480 | 9,196 | 81 | 11 | 2,765 | 109 | 19,841 |
| 52 | Fulton | 441 | 19,188,280 | 1,489,348 | 2,221,946 | 7,527,496 | 7,999,496 | 483 | 909 | 969,826 | 10,803 | 3,494,947 |
| 53 | Gilmer | 46 | 167,568 | 73,279 | 16,595 | 43,305 | 84,384 | 62 | 4 | 1,760 | 68 | 11,317 |
| 54 | Glascok | 4 | 7,250 | 750 | 800 | 5,600 | | 6 | 1 | 275 | 10 | 1,969 |
| 55 | Glynn | 34 | 677,659 | 137,337 | 102,758 | 206,922 | 230,542 | 89 | 33 | 24,514 | 894 | 343,361 |
| 56 | Gordon | 44 | 89,143 | 9,135 | 18,725 | 47,025 | 14,258 | 67 | 1 | 100 | 62 | 11,020 |
| 57 | Greene | 46 | 120,088 | 7,650 | 17,902 | 79,816 | 15,220 | 62 | 9 | 1,764 | 140 | 20,847 |
| 58 | Gwinnett | 92 | 437,076 | 15,221 | 45,820 | 137,715 | 238,320 | 113 | 33 | 22,760 | 665 | 108,965 |
| 59 | Habersham | 64 | 497,750 | 37,055 | 92,476 | 218,292 | 149,928 | 64 | 17 | 14,105 | 490 | 80,222 |
| 60 | Hall | 85 | 395,400 | 52,288 | 50,220 | 136,445 | 126,507 | 104 | 23 | 14,986 | 597 | 143,644 |
| 61 | Hancock | 36 | 70,532 | 5,135 | 13,300 | 36,322 | 15,275 | 41 | 2 | 370 | 81 | 11,610 |
| 62 | Haralson | 61 | 189,509 | 17,470 | 20,765 | 67,475 | 74,793 | 82 | 10 | 5,750 | 216 | 65,709 |
| 63 | Harris | 42 | 308,756 | 26,412 | 74,695 | 160,750 | 46,999 | 50 | 12 | 2,832 | 203 | 35,689 |
| 64 | Hart | 36 | 240,690 | 26,655 | 58,850 | 114,475 | 40,710 | 47 | 13 | 6,421 | 232 | 88,022 |
| 65 | Heard | 43 | 69,031 | 13,321 | 9,465 | 36,470 | 4,885 | 48 | 3 | 165 | 47 | 9,688 |
| 66 | Henry | 49 | 116,566 | 11,460 | 20,285 | 48,365 | 27,510 | 72 | 5 | 577 | 86 | 16,558 |
| 67 | Houston | 37 | 208,774 | 12,925 | 28,500 | 75,162 | 92,187 | 44 | 11 | 5,930 | 217 | 40,324 |
| 68 | Irwin | 79 | 743,944 | 318,435 | 42,819 | 290,259 | 92,431 | 102 | 34 | 21,380 | 948 | 216,055 |
| 69 | Jackson | 79 | 308,648 | 11,155 | 57,330 | 131,368 | 108,695 | 98 | 13 | 4,963 | 312 | 52,498 |
| 70 | Jasper | 88 | 58,545 | 2,831 | 6,305 | 31,468 | 13,590 | 45 | 1 | 600 | 65 | 14,158 |
| 71 | Jefferson | 37 | 69,768 | 7,830 | 13,043 | 32,928 | 5,967 | 44 | 8 | 2,620 | 107 | 21,877 |
| 72 | Johnson | 32 | 77,646 | 19,663 | 5,680 | 36,243 | 16,060 | 46 | 18 | 3,769 | 245 | 40,752 |
| 73 | Jones | 19 | 89,140 | 21,585 | 40,591 | 38,135 | 6,540 | 23 | 2 | 310 | 28 | 4,949 |
| 74 | Laurens | 83 | 437,185 | 63,449 | 40,501 | 160,635 | 172,060 | 95 | 20 | 11,790 | 603 | 132,974 |
| 75 | Lee | 33 | 109,880 | 42,220 | 11,200 | 38,430 | 17,530 | 35 | 13 | 5,620 | 127 | 25,503 |
| 76 | Liberty | 42 | 144,287 | 41,277 | 15,885 | 66,648 | 30,582 | 55 | 34 | 13,374 | 790 | 163,925 |

BY COUNTIES: 1900.

| AVERAGE NUMBER OF WAGE-EARNERS AND TOTAL WAGES—continued. | | | | | | MISCELLANEOUS EXPENSES. | | | | | COST OF MATERIALS USED. | | | Value of products, including custom work and repairing. | |
|---|--------------|---------------------------|-------------|---------------------------|-----------|-------------------------|----------------|--|---------------------------------|----------------|-------------------------|---|----------------------------------|---|----|
| Men, 16 years and over. | | Women, 16 years and over. | | Children, under 16 years. | | Total. | Rent of works. | Taxes, not including internal revenue. | Rent of offices, interest, etc. | Contract work. | Total. | Principal materials, including mill supplies and freight. | Fuel and rent of power and heat. | | |
| Average number. | Wages. | Average number. | Wages. | Average number. | Wages. | | | | | | | | | | |
| 66,540 | \$17,582,519 | 10,929 | \$2,015,852 | 6,878 | \$601,700 | \$5,821,330 | \$478,942 | \$640,949 | \$8,998,762 | \$212,677 | \$58,282,202 | \$56,793,964 | \$1,438,288 | \$106,654,527 | 1 |
| 794 | 167,888 | 1 | 50 | 34 | 8,205 | 8,806 | 112 | 2,207 | 6,487 | | 327,302 | 826,252 | 1,650 | 693,706 | 2 |
| 302 | 87,411 | 2 | 500 | | | 1,780 | 185 | 458 | 1,107 | | 63,221 | 61,501 | 720 | 171,314 | 3 |
| 193 | 34,963 | 3 | 831 | | 292 | 12,856 | 1,832 | 2,379 | 8,645 | | 200,778 | 189,953 | 10,820 | 324,284 | 4 |
| 69 | 11,385 | | | 4 | 220 | 1,123 | 809 | 455 | 831 | | 58,895 | 57,925 | 470 | 101,162 | 5 |
| 253 | 59,409 | 8 | 975 | 9 | 887 | 12,693 | 1,716 | 2,820 | 7,742 | 416 | 580,912 | 519,626 | 11,286 | 704,691 | 6 |
| 1,271 | 288,128 | 4 | 820 | 27 | 2,980 | 15,417 | 1,704 | 5,074 | 8,689 | | 450,128 | 448,686 | 1,242 | 1,083,225 | 7 |
| 3,051 | 953,770 | 745 | 129,849 | 825 | 44,996 | 464,916 | 37,438 | 41,829 | 8,824,447 | 26,815 | 8,949,059 | 8,824,447 | 124,612 | 6,901,219 | 8 |
| 572 | 130,086 | | | 13 | 1,045 | 7,828 | 425 | 1,171 | 5,732 | | 286,527 | 284,817 | 1,710 | 462,572 | 9 |
| 889 | 67,428 | 1 | 68 | 4 | 250 | 7,898 | 861 | 2,087 | 861 | 4,075 | 104,806 | 104,284 | 522 | 246,408 | 10 |
| 1,400 | 261,433 | 2 | 850 | 7 | 556 | 12,263 | 1,037 | 2,002 | 9,000 | 224 | 271,377 | 268,319 | 8,058 | 707,917 | 11 |
| 153 | 80,988 | 1 | 450 | | | 10,626 | 681 | 992 | 8,958 | | 145,259 | 136,651 | 8,608 | 277,661 | 12 |
| 159 | 41,656 | 75 | 9,165 | 107 | 11,259 | 10,493 | 445 | 1,984 | 8,114 | | 253,699 | 249,046 | 4,653 | 417,976 | 13 |
| 204 | 37,812 | | | 2 | 105 | 6,050 | 143 | 923 | 3,740 | 1,230 | 114,161 | 112,122 | 2,029 | 224,434 | 14 |
| 551 | 93,696 | | | 4 | | 8,540 | 400 | 817 | 6,493 | 800 | 100,808 | 100,263 | 545 | 268,687 | 15 |
| 119 | 28,481 | 47 | 7,915 | 45 | 5,086 | 13,593 | 210 | 802 | 12,581 | | 285,828 | 280,493 | 5,335 | 388,396 | 16 |
| 166 | 87,941 | 48 | 8,068 | 39 | 2,860 | 12,266 | 1,480 | 2,978 | 7,804 | 4 | 209,304 | 203,168 | 6,136 | 458,138 | 17 |
| 81 | 5,779 | | | 2 | 171 | 337 | 160 | 151 | 86 | | 46,943 | 45,517 | 501 | 74,874 | 18 |
| 214 | 42,990 | | | 6 | 680 | 1,272 | 674 | 674 | 498 | 100 | 59,556 | 59,355 | 201 | 146,792 | 19 |
| 8,334 | 1,288,039 | 149 | 22,007 | 44 | 2,226 | 495,437 | 66,792 | 52,061 | 374,584 | 2,200 | 4,205,324 | 4,102,989 | 102,325 | 6,067,783 | 20 |
| 56 | 9,841 | | | 252 | 24,808 | 24,040 | 423 | 5,765 | 17,652 | 200 | 30,012 | 29,908 | 104 | 88,237 | 21 |
| 326 | 69,537 | 251 | 47,008 | 4 | 951 | 13,865 | 944 | 6,768 | 12,893 | | 527,047 | 515,764 | 11,283 | 868,820 | 22 |
| 111 | 25,949 | 5 | 805 | 281 | 24,893 | 72,959 | 6,638 | 8,511 | 57,080 | 180 | 111,088 | 109,679 | 4,896 | 195,888 | 23 |
| 578 | 149,925 | 312 | 50,552 | 8 | 222 | 2,870 | 493 | 737 | 5,120 | | 121,377 | 117,357 | 20,464 | 1,346,746 | 24 |
| 72 | 13,107 | | | 6 | 450 | 1,855 | 154 | 424 | 807 | | 52,628 | 51,713 | 4,020 | 156,070 | 25 |
| 54 | 10,971 | | | 12 | 1,236 | 10,656 | | 1,494 | 9,162 | | 162,762 | 159,593 | 3,169 | 627,728 | 26 |
| 1,586 | 286,245 | 184 | 28,882 | 210 | 21,850 | 91,258 | 4,237 | 8,726 | 75,140 | 3,116 | 769,732 | 750,219 | 19,513 | 1,372,750 | 27 |
| 801 | 216,235 | 2 | 144 | 4 | 840 | 29,330 | 965 | 8,102 | 20,203 | | 384,315 | 383,185 | 1,330 | 1,147,209 | 28 |
| 1,672 | 391,235 | 4 | 500 | 3 | 560 | 26,801 | 450 | 5,141 | 20,885 | 825 | 416,808 | 414,460 | 1,348 | 1,044,450 | 29 |
| 1,418 | 307,977 | 5 | 650 | 5 | 650 | 414 | 138 | 244 | 32 | | 14,661 | 14,426 | 235 | 30,682 | 30 |
| 39 | 6,987 | | | 100 | 9,450 | 48,513 | 1,887 | 7,677 | 38,789 | 190 | 580,567 | 517,629 | 12,938 | 893,274 | 31 |
| 445 | 105,114 | 104 | 16,660 | 1 | 55 | 16,688 | 20 | 389 | 469 | | 49,126 | 48,164 | 972 | 140,455 | 32 |
| 99 | 17,908 | | | 1 | | 16,688 | 20 | 467 | 11,168 | 5,043 | 49,150 | 48,804 | 1,295 | 131,573 | 33 |
| 73 | 18,338 | | | 1 | | 16,688 | 20 | 311 | 280 | 25 | 46,220 | 46,024 | 205 | 60,133 | 34 |
| 1,027 | 2,988 | | | 79 | 5,970 | 59,448 | 700 | 5,278 | 30,670 | 22,800 | 733,575 | 734,144 | 4,431 | 1,718,734 | 35 |
| 405 | 148,562 | 6 | 1,125 | 42 | 1,500 | 53,588 | 3,428 | 4,288 | 35,322 | 10,500 | 362,437 | 347,502 | 14,511 | 607,702 | 37 |
| 435 | 110,472 | | | 12 | 1,728 | 11,081 | 415 | 1,768 | 5,403 | 3,500 | 200,169 | 198,957 | 1,212 | 509,088 | 38 |
| 821 | 185,672 | 9 | 750 | 9 | 750 | 15,246 | 1,098 | 8,580 | 10,475 | 93 | 458,008 | 452,320 | 5,688 | 800,696 | 39 |
| 389 | 85,984 | 6 | 1,304 | 14 | 1,206 | 29,767 | 4,148 | 8,747 | 21,222 | 450 | 225,467 | 203,673 | 21,799 | 480,545 | 40 |
| 46 | 8,701 | | | 2 | 100 | 1,347 | 728 | 350 | 274 | | 47,783 | 46,932 | 801 | 81,616 | 41 |
| 780 | 173,524 | 1 | 300 | 4 | 480 | 6,648 | 428 | 2,941 | 3,279 | | 369,940 | 369,940 | 1,141 | 1,286,406 | 42 |
| 236 | 51,910 | | | 4 | 870 | 4,580 | 470 | 470 | 4,000 | | 39,195 | 38,405 | 790 | 107,568 | 43 |
| 460 | 94,757 | 3 | 834 | 8 | 688 | 10,728 | 480 | 1,250 | 8,998 | | 165,116 | 164,888 | 228 | 348,614 | 44 |
| 253 | 53,214 | 92 | 12,675 | 104 | 9,904 | 14,480 | 1,064 | 9,028 | 10,288 | 50 | 291,190 | 278,842 | 12,357 | 482,670 | 45 |
| 1,008 | 197,294 | 6 | 912 | 6 | 411 | 12,094 | 916 | 2,206 | 8,487 | 485 | 269,052 | 267,528 | 1,524 | 624,234 | 46 |
| 140 | 52,356 | | | 3 | 247 | 1,645 | 123 | 1,048 | 469 | | 62,602 | 61,870 | 732 | 141,654 | 47 |
| 28 | 4,878 | | | 3 | | 639 | 95 | 241 | 203 | | 31,946 | 30,814 | 1,132 | 47,993 | 48 |
| 1,606 | 466,750 | 314 | 65,024 | 309 | 31,178 | 141,175 | 9,220 | 21,181 | 110,771 | | 1,622,111 | 1,482,741 | 139,370 | 2,982,674 | 49 |
| 16 | 2,432 | | | 5 | 511 | 2,907 | 463 | 881 | 1,653 | | 21,727 | 21,491 | 266 | 83,785 | 50 |
| 104 | 19,330 | | | 5 | 511 | 2,907 | 463 | 881 | 1,653 | | 119,148 | 115,497 | 3,651 | 189,027 | 51 |
| 7,756 | 2,945,527 | 2,195 | 484,558 | 852 | 114,862 | 1,571,669 | 150,690 | 108,808 | 1,256,127 | 56,046 | 10,748,684 | 10,495,421 | 253,263 | 20,049,206 | 52 |
| 66 | 11,092 | | | 2 | 225 | 3,455 | 168 | 69 | 2,679 | | 88,103 | 87,983 | 120 | 167,275 | 53 |
| 10 | 1,969 | | | | | 215 | 65 | 150 | 4 | | 4,893 | 4,188 | 205 | 13,901 | 54 |
| 875 | 389,777 | 6 | 1,970 | 18 | 1,614 | 48,085 | 12,085 | 8,945 | 20,272 | 7,370 | 820,312 | 809,756 | 10,556 | 1,678,025 | 55 |
| 62 | 11,020 | | | 2 | 249 | 2,149 | 771 | 654 | 720 | 4 | 170,423 | 168,007 | 2,326 | 230,157 | 56 |
| 73 | 12,958 | 41 | 6,021 | 26 | 1,865 | 5,403 | 509 | 728 | 2,991 | 1,175 | 92,447 | 87,718 | 4,729 | 163,626 | 57 |
| 550 | 98,959 | 29 | 8,798 | 36 | 11,208 | 13,486 | 457 | 2,013 | 11,016 | | 859,503 | 854,083 | 5,420 | 1,190,643 | 58 |
| 286 | 57,277 | 104 | 18,832 | 100 | 9,113 | 22,743 | 462 | 2,245 | 18,916 | 1,120 | 224,461 | 219,065 | 5,396 | 462,429 | 59 |
| 487 | 129,504 | 45 | 7,525 | 65 | 6,615 | 20,171 | 4,373 | 3,539 | 12,194 | 65 | 553,985 | 540,000 | 13,985 | 855,885 | 60 |
| 70 | 10,885 | 4 | 250 | 7 | 475 | 1,988 | 631 | 525 | 682 | 100 | 51,266 | 49,620 | 1,646 | 86,085 | 61 |
| 199 | 60,959 | 1 | 860 | 16 | 4,890 | 8,997 | 777 | 1,287 | 6,083 | 950 | 131,766 | 114,298 | 17,468 | 277,301 | 62 |
| 110 | 23,582 | 40 | 7,774 | 53 | 4,323 | 8,409 | 136 | 1,172 | 2,101 | | 123,199 | 123,766 | 2,493 | 285,234 | 63 |
| 88 | 17,885 | 43 | 8,459 | 106 | 12,144 | 5,927 | 212 | 906 | 4,809 | | 129,195 | 125,103 | 4,082 | 233,479 | 64 |
| 47 | 9,688 | | | | | 859 | 143 | 627 | 84 | | 67,013 | 66,059 | 954 | 102,250 | 65 |
| 58 | 10,658 | 23 | 5,500 | 5 | 400 | 4,493 | 590 | 793 | 3,105 | | 79,327 | 76,007 | 3,320 | 147,118 | 66 |
| 214 | 39,849 | | | 3 | 475 | 6,087 | 494 | 1,193 | 4,400 | | 95,248 | 93,540 | 1,708 | 208,650 | 67 |
| 923 | 213,589 | 8 | 982 | 17 | 1,481 | 9,531 | 1,451 | 3,361 | 4,426 | 293 | 803,491 | 301,193 | 2,298 | 702,820 | 68 |
| 200 | 40,201 | 52 | 8,450 | 60 | 3,847 | 6,953 | 1,210 | 2,834 | 3,409 | | 251,067 | 245,527 | 5,540 | 413,302 | 69 |
| 56 | 13,048 | 4 | 600 | 5 | 610 | 1,816 | 692 | 305 | 779 | 100 | 51,553 | 49,535 | 2,018 | 99,636 | 70 |
| 107 | 21,877 | | | | | 1,713 | 96 | 815 | 802 | | 47,351 | 46,871 | 980 | 88,277 | 71 |
| 245 | 40,752 | | | | | 4,808 | 249 | 1,318 | 3,241 | | 75,443 | 74,248 | 1,195 | 178,574 | 72 |
| 24 | 4,457 | 2 | 216 | 2 | 276 | 818 | | | | | | | | | |

TABLE 6.—MANUFACTURES

| | COUNTIES AND MANUFACTURING AND MECHANICAL INDUSTRIES. | Number of establishments. | CAPITAL. | | | | | Proprietors and firm members. | SALARIED OFFICIALS, CLERKS, ETC. | | AVERAGE NUMBER OF WAGE-EARNERS AND TOTAL WAGES. | |
|-----|---|---------------------------|-----------|---------|------------|-----------------------------------|--------------------|-------------------------------|----------------------------------|-----------|---|--------|
| | | | Total. | Land. | Buildings. | Machinery, tools, and implements. | Cash and sundries. | | Number. | Salaries. | Total. | |
| | | | | | | | | | | | Average number. | Wages. |
| 77 | Lincoln | 13 | \$25,570 | \$1,705 | \$6,785 | \$14,830 | \$2,800 | 18 | \$30 | 15 | \$2,368 | |
| 78 | Lowides | 97 | 650,512 | 90,751 | 54,332 | 238,689 | 266,740 | 117 | 29,810 | 906 | 191,111 | |
| 79 | Lumpkin | 36 | 41,310 | 13,321 | 5,981 | 19,015 | 2,998 | 45 | 1 | 34 | 5,560 | |
| 80 | McDuffie | 27 | 36,253 | 3,188 | 6,785 | 18,755 | 7,625 | 31 | 5 | 42 | 7,355 | |
| 81 | McIntosh | 11 | 179,291 | 27,637 | 15,745 | 30,379 | 105,680 | 7 | 19 | 289 | 69,128 | |
| 82 | Macon | 35 | 62,191 | 21,650 | 4,955 | 28,940 | 6,646 | 40 | 4 | 75 | 14,189 | |
| 83 | Madison | 38 | 66,698 | 8,033 | 10,255 | 30,910 | 17,480 | 56 | 4 | 41 | 6,853 | |
| 84 | Marion | 23 | 30,995 | 2,370 | 7,675 | 15,650 | 5,300 | 26 | 4 | 46 | 9,062 | |
| 85 | Meriwether | 61 | 259,056 | 27,931 | 42,860 | 146,990 | 41,275 | 89 | 11 | 145 | 33,237 | |
| 86 | Miller | 15 | 126,463 | 57,721 | 6,906 | 23,048 | 38,778 | 20 | 10 | 340 | 71,559 | |
| 87 | Milton | 22 | 19,815 | 745 | 3,730 | 14,075 | 1,265 | 36 | 1 | 18 | 2,381 | |
| 88 | Mitchell | 25 | 235,610 | 121,365 | 19,595 | 69,940 | 24,710 | 32 | 16 | 197 | 43,455 | |
| 89 | Monroe | 49 | 324,093 | 13,310 | 66,620 | 177,702 | 67,161 | 58 | 7 | 195 | 41,548 | |
| 90 | Montgomery | 62 | 621,588 | 172,193 | 55,173 | 271,903 | 122,319 | 85 | 41 | 1,021 | 207,900 | |
| 91 | Morgan | 42 | 163,706 | 6,576 | 27,966 | 82,948 | 46,216 | 48 | 14 | 97 | 25,454 | |
| 92 | Murray | 27 | 39,632 | 13,340 | 6,490 | 15,785 | 4,017 | 32 | 1 | 41 | 5,694 | |
| 93 | Muscogee | 151 | 5,729,012 | 339,263 | 841,143 | 1,776,417 | 2,773,219 | 171 | 197 | 4,883 | 1,221,157 | |
| 94 | Newton | 71 | 799,620 | 64,735 | 108,789 | 372,927 | 263,169 | 83 | 13 | 477 | 75,636 | |
| 95 | Oconee | 27 | 120,090 | 20,675 | 20,675 | 81,505 | 12,825 | 33 | 7 | 97 | 19,851 | |
| 96 | Oglethorpe | 56 | 114,434 | 5,352 | 18,845 | 72,180 | 18,057 | 56 | 12 | 75 | 14,061 | |
| 97 | Paulding | 50 | 63,823 | 8,340 | 7,155 | 35,523 | 12,805 | 63 | 3 | 168 | 24,165 | |
| 98 | Pickens | 39 | 276,911 | 26,686 | 37,420 | 101,263 | 111,542 | 46 | 15 | 189 | 46,851 | |
| 99 | Pierce | 22 | 432,314 | 194,075 | 35,039 | 118,767 | 89,883 | 24 | 15 | 408 | 87,773 | |
| 100 | Pike | 54 | 686,563 | 24,105 | 78,220 | 206,570 | 277,668 | 51 | 29 | 610 | 125,695 | |
| 101 | Polk | 65 | 1,417,455 | 141,441 | 481,750 | 562,085 | 232,179 | 66 | 37 | 1,054 | 188,830 | |
| 102 | Pulaski | 44 | 186,584 | 25,915 | 12,765 | 57,725 | 90,170 | 54 | 11 | 278 | 60,351 | |
| 103 | Putnam | 28 | 42,460 | 3,535 | 13,675 | 19,540 | 5,710 | 29 | 1 | 42 | 7,339 | |
| 104 | Quitman | 6 | 4,935 | 1,345 | 780 | 2,350 | 460 | 7 | — | 6 | 1,290 | |
| 105 | Rabun | 23 | 8,620 | 1,370 | 2,095 | 4,145 | 1,010 | 25 | — | 14 | 1,693 | |
| 106 | Randolph | 35 | 61,960 | 10,210 | 8,965 | 34,835 | 7,950 | 40 | 4 | 51 | 10,556 | |
| 107 | Richmond | 403 | 9,030,679 | 912,689 | 1,008,626 | 3,810,969 | 2,898,395 | 894 | 265 | 7,206 | 1,827,795 | |
| 108 | Rockdale | 28 | 41,945 | 9,350 | 24,480 | 3,535 | 24,480 | 35 | 1 | 46 | 10,062 | |
| 109 | Schley | 11 | 14,185 | 3,855 | 3,235 | 9,665 | 490 | 12 | 1 | 9 | 1,279 | |
| 110 | Screven | 59 | 259,643 | 116,708 | 24,648 | 56,017 | 62,270 | 71 | 16 | 640 | 116,749 | |
| 111 | Spalding | 49 | 1,438,287 | 21,665 | 248,150 | 654,708 | 513,734 | 52 | 29 | 1,039 | 234,082 | |
| 112 | Stewart | 36 | 117,049 | 18,108 | 28,166 | 47,485 | 23,290 | 42 | 8 | 76 | 14,513 | |
| 113 | Sumter | 98 | 502,194 | 60,403 | 63,980 | 248,393 | 129,418 | 98 | 34 | 624 | 215,380 | |
| 114 | Talbot | 24 | 108,168 | 43,228 | 13,880 | 31,885 | 19,175 | 33 | 4 | 74 | 13,531 | |
| 115 | Taliaferro | 22 | 30,055 | 4,620 | 7,655 | 16,555 | 1,225 | 24 | 2 | 17 | 2,660 | |
| 116 | Tattall | 102 | 430,810 | 152,097 | 49,449 | 135,299 | 98,965 | 127 | 48 | 1,250 | 258,431 | |
| 117 | Taylor | 29 | 130,424 | 9,255 | 16,343 | 69,994 | 34,332 | 34 | 5 | 145 | 25,686 | |
| 118 | Telfair | 49 | 208,827 | 78,764 | 15,875 | 69,743 | 49,445 | 79 | 24 | 635 | 137,043 | |
| 119 | Terrell | 61 | 168,977 | 14,110 | 32,362 | 95,115 | 27,390 | 77 | 19 | 263 | 61,968 | |
| 120 | Thomas | 117 | 389,950 | 54,247 | 33,661 | 181,470 | 120,572 | 154 | 26 | 1,049 | 213,505 | |
| 121 | Towns | 17 | 12,485 | 2,950 | 2,130 | 3,370 | 3,535 | 24 | 1 | 15 | 3,088 | |
| 122 | Troup | 69 | 1,223,711 | 60,965 | 182,039 | 605,827 | 374,880 | 65 | 25 | 934 | 190,345 | |
| 123 | Twiggs | 15 | 17,746 | 4,810 | 11,515 | 11,515 | 4,020 | 16 | — | 23 | 4,118 | |
| 124 | Union | 20 | 18,415 | 1,915 | 4,250 | 9,000 | 3,250 | 21 | 1 | 17 | 3,063 | |
| 125 | Upson | 32 | 201,366 | 28,982 | 27,330 | 77,025 | 68,029 | 23 | 11 | 113 | 28,407 | |
| 126 | Walker | 44 | 1,823,005 | 78,307 | 283,459 | 491,973 | 969,261 | 39 | 37 | 780 | 147,259 | |
| 127 | Walton | 71 | 910,150 | 14,951 | 175,779 | 330,000 | 330,420 | 70 | 27 | 745 | 126,099 | |
| 128 | Ware | 78 | 327,369 | 55,941 | 34,600 | 153,076 | 78,752 | 89 | 50 | 800 | 214,041 | |
| 129 | Warren | 35 | 87,301 | 3,325 | 19,710 | 48,358 | 15,408 | 42 | 4 | 137 | 27,452 | |
| 130 | Washington | 69 | 171,926 | 24,435 | 22,395 | 72,620 | 62,476 | 82 | 15 | 259 | 51,490 | |
| 131 | Wayne | 38 | 137,273 | 51,406 | 12,037 | 46,218 | 27,612 | 57 | 15 | 446 | 100,997 | |
| 132 | Webster | 12 | 11,405 | 695 | 3,000 | 7,250 | 460 | 13 | — | 10 | 1,407 | |
| 133 | White | 22 | 13,195 | 1,495 | 3,505 | 12,185 | 1,010 | 25 | — | 18 | 2,773 | |
| 134 | Whitfield | 61 | 811,960 | 27,285 | 120,795 | 366,917 | 296,963 | 83 | 31 | 859 | 148,815 | |
| 135 | Wilcox | 41 | 470,294 | 80,199 | 16,225 | 213,637 | 160,133 | 63 | 30 | 803 | 157,742 | |
| 136 | Wilkes | 48 | 161,620 | 13,013 | 26,805 | 77,110 | 44,692 | 57 | 13 | 113 | 27,042 | |
| 137 | Wilkinson | 28 | 76,369 | 16,495 | 8,190 | 47,342 | 3,342 | 35 | 3 | 33 | 14,411 | |
| 138 | Worth | 72 | 676,592 | 216,158 | 42,509 | 237,055 | 130,270 | 92 | 37 | 910 | 190,784 | |

TABLE 7.—MANUFACTURES BY

| | 7,504 | \$89,789,656 | \$10,992,824 | \$13,290,214 | \$32,830,482 | \$32,676,136 | 8,828 | 4,203 | \$3,354,946 | 83,842 | \$20,290,071 | |
|----|--|--------------|--------------|--------------|--------------|--------------|--------------|-------|-------------|-------------|--------------|--------------|
| 1 | All industries | 7,504 | \$89,789,656 | \$10,992,824 | \$13,290,214 | \$32,830,482 | \$32,676,136 | 8,828 | 4,203 | \$3,354,946 | 83,842 | \$20,290,071 |
| 2 | Agricultural implements | 10 | 454,988 | 101,980 | 33,750 | 70,552 | 243,706 | 10 | 23 | 30,384 | 360 | 99,951 |
| 3 | Awnings, tents, and sails | 3 | 12,825 | 500 | 1,500 | 475 | 10,350 | 6 | 2 | 2,000 | 11 | 4,645 |
| 4 | Baking and yeast powders | 3 | 40,100 | 500 | 1,500 | 2,600 | 35,500 | 2 | 9 | 9,520 | 27 | 4,486 |
| 5 | Baskets, and rattan and willow ware | 4 | 62,850 | 8,150 | 6,000 | 22,000 | 16,700 | 5 | 2 | 880 | 44 | 11,170 |
| 6 | Bicycle and tricycle repairing | 58 | 50,507 | 2,160 | 1,915 | 20,512 | 26,010 | 63 | 9 | 4,886 | 84 | 24,937 |
| 7 | Blacksmithing and wheelwrighting | 621 | 336,482 | 70,059 | 62,534 | 97,919 | 155,970 | 719 | 4 | 1,556 | 572 | 160,928 |
| 8 | Boots and shoes, custom work and repairing | 169 | 33,682 | 1,555 | 3,335 | 12,406 | 15,886 | 178 | 1 | 600 | 131 | 40,595 |
| 9 | Boots and shoes, factory product | 5 | 90,700 | 1,500 | 6,500 | 23,400 | 59,300 | 10 | 9 | 3,200 | 250 | 66,000 |
| 10 | Boxes, fancy and paper | 3 | 72,017 | 6,000 | — | 22,964 | 44,053 | 4 | 12 | 13,576 | 123 | 29,125 |
| 11 | Boxes, wooden packing | 7 | 187,170 | 13,650 | 23,204 | 45,955 | 104,361 | 3 | 19 | 9,430 | 274 | 56,164 |

BY COUNTIES: 1900—Continued.

| AVERAGE NUMBER OF WAGE-EARNERS AND TOTAL WAGES—continued. | | | | | | MISCELLANEOUS EXPENSES. | | | | | COST OF MATERIALS USED. | | | Value of products, including custom work and repairing. | |
|---|-----------|---------------------------|---------|---------------------------|--------|-------------------------|----------------|--|---------------------------------|----------------|-------------------------|---|----------------------------------|---|-----|
| Men, 16 years and over. | | Women, 16 years and over. | | Children, under 16 years. | | Total. | Rent of works. | Taxes, not including internal revenue. | Rent of offices, interest, etc. | Contract work. | Total. | Principal materials, including mill supplies and freight. | Fuel and rent of power and heat. | | |
| Average number. | Wages. | Average number. | Wages. | Average number. | Wages. | | | | | | | | | | |
| 12 | \$2,168 | | | 3 | \$200 | \$448 | \$36 | \$142 | \$270 | | \$22,748 | \$22,586 | \$162 | \$32,418 | 77 |
| 891 | 188,226 | 9 | \$2,250 | 6 | 635 | 31,648 | 4,495 | 4,803 | 11,320 | \$11,530 | 506,340 | 502,146 | 4,194 | 1,006,569 | 78 |
| 31 | 5,205 | 1 | 75 | 2 | 280 | 1,551 | 950 | 274 | 330 | | 35,456 | 35,251 | 205 | 60,587 | 79 |
| 37 | 6,700 | 1 | 275 | 4 | 380 | 1,422 | 484 | 352 | 580 | 6 | 29,104 | 28,121 | 983 | 52,423 | 80 |
| 286 | 68,828 | | | 3 | 800 | 2,413 | 278 | 655 | 1,405 | 75 | 80,649 | 79,729 | 920 | 221,280 | 81 |
| 75 | 14,189 | | | | | 1,878 | 1,108 | 364 | 406 | | 33,529 | 32,568 | 961 | 76,951 | 82 |
| 40 | 6,803 | | | 1 | 50 | 1,147 | 207 | 535 | 355 | | 72,355 | 71,505 | 850 | 105,543 | 83 |
| 43 | 8,860 | | | 3 | 202 | 1,170 | 666 | 191 | 313 | | 17,397 | 16,864 | 533 | 68,165 | 84 |
| 141 | 32,392 | 2 | 505 | 2 | 340 | 39,114 | 254 | 1,736 | 37,069 | 55 | 308,342 | 308,799 | 4,003 | 471,029 | 85 |
| 839 | 71,463 | | | 1 | 96 | 1,372 | 60 | 716 | 596 | | 57,877 | 57,424 | 453 | 175,200 | 86 |
| 16 | 2,216 | | | 2 | 165 | 416 | 59 | 157 | 200 | | 20,143 | 19,526 | 617 | 33,204 | 87 |
| 197 | 43,455 | | | | | 4,874 | 48 | 878 | 3,948 | | 118,917 | 116,044 | 3,873 | 204,726 | 88 |
| 121 | 31,988 | 28 | 3,914 | 46 | 5,646 | 8,841 | 490 | 2,260 | 6,091 | | 294,575 | 286,066 | 8,509 | 423,308 | 89 |
| 1,008 | 206,542 | | | 16 | 1,358 | 17,701 | 2,311 | 3,088 | 12,012 | 290 | 352,757 | 349,101 | 3,656 | 854,108 | 90 |
| 94 | 25,154 | 1 | 200 | 2 | 100 | 15,287 | 1,250 | 1,243 | 12,794 | | 85,146 | 81,605 | 3,541 | 155,288 | 91 |
| 41 | 5,694 | | | | | 1,140 | 114 | 356 | 670 | | 29,392 | 29,085 | 307 | 44,589 | 92 |
| 2,850 | 807,017 | 1,591 | 365,921 | 412 | 48,219 | 418,054 | 19,411 | 42,940 | 350,248 | 460 | 3,683,560 | 3,601,287 | 87,273 | 6,207,697 | 93 |
| 239 | 43,275 | 126 | 19,391 | 62 | 12,970 | 23,666 | 1,042 | 7,578 | 14,996 | 50 | 337,162 | 335,213 | 1,949 | 526,464 | 94 |
| 66 | 13,242 | 15 | 8,500 | 16 | 3,112 | 1,574 | 482 | 470 | 622 | | 116,561 | 115,066 | 1,495 | 164,910 | 95 |
| 73 | 13,861 | | | 2 | 200 | 3,816 | 765 | 1,436 | 1,615 | | 116,837 | 112,937 | 3,900 | 144,951 | 96 |
| 162 | 23,600 | | | 6 | 565 | 3,430 | 570 | 724 | 336 | 1,800 | 72,452 | 71,197 | 1,255 | 149,227 | 97 |
| 171 | 45,421 | 14 | 1,280 | 4 | 150 | 25,804 | 152 | 570 | 25,082 | | 110,701 | 106,146 | 4,555 | 240,463 | 98 |
| 402 | 36,737 | | | 6 | 1,036 | 8,788 | 2,691 | 1,515 | 4,582 | | 244,465 | 242,447 | 2,018 | 418,779 | 99 |
| 299 | 89,760 | 195 | 26,519 | 116 | 9,316 | 28,204 | 899 | 5,001 | 22,054 | 250 | 639,945 | 629,403 | 10,542 | 1,105,657 | 100 |
| 600 | 135,840 | 249 | 39,386 | 205 | 23,604 | 69,681 | 3,481 | 6,863 | 49,247 | | 823,342 | 775,185 | 48,157 | 1,219,628 | 101 |
| 271 | 58,576 | 5 | 1,700 | 2 | 75 | 9,926 | 979 | 1,099 | 7,723 | 125 | 154,191 | 152,142 | 2,040 | 345,797 | 102 |
| 31 | 6,109 | 6 | 780 | 5 | 500 | 1,847 | 739 | 919 | 189 | | 118,167 | 117,471 | 696 | 154,623 | 103 |
| 6 | 1,200 | | | | | 51 | | 51 | | | 13,324 | 13,274 | 50 | 16,736 | 104 |
| 12 | 1,213 | 2 | 480 | | | 208 | 61 | 84 | 61 | 2 | 18,007 | 17,957 | 50 | 24,838 | 105 |
| 49 | 9,501 | 2 | 680 | 3 | 375 | 1,957 | 630 | 660 | 767 | | 31,129 | 29,661 | 1,468 | 68,108 | 106 |
| 4,455 | 1,375,126 | 2,031 | 852,634 | 670 | 70,035 | 638,839 | 64,649 | 117,881 | 461,259 | 5,100 | 6,261,901 | 6,119,250 | 142,651 | 10,129,332 | 107 |
| 37 | 8,772 | 3 | 555 | 6 | 735 | 3,774 | 665 | 947 | 2,729 | 83 | 41,884 | 40,281 | 1,603 | 73,573 | 108 |
| 8 | 1,179 | | | 1 | 100 | 198 | 24 | 142 | 32 | | 3,152 | 2,802 | 350 | 10,701 | 109 |
| 637 | 116,323 | | | 3 | 424 | 10,269 | 431 | 1,511 | 3,327 | 5,000 | 93,775 | 96,475 | 2,300 | 318,866 | 110 |
| 540 | 151,056 | 263 | 55,853 | 236 | 27,056 | 45,758 | 1,032 | 9,181 | 35,495 | 50 | 584,341 | 562,016 | 22,325 | 1,122,832 | 111 |
| 72 | 13,901 | | | 4 | 617 | 3,352 | 519 | 933 | 1,795 | 105 | 78,309 | 71,484 | 2,375 | 121,020 | 112 |
| 604 | 212,482 | 14 | 2,470 | 6 | 628 | 28,215 | 4,651 | 5,607 | 17,957 | | 396,188 | 381,281 | 14,907 | 785,771 | 113 |
| 73 | 13,408 | 1 | 173 | | | 2,461 | 325 | 641 | 1,485 | | 44,216 | 42,322 | 1,894 | 78,028 | 114 |
| 15 | 2,320 | 1 | 100 | 1 | 240 | 329 | 81 | 170 | 78 | | 29,328 | 28,719 | 609 | 44,795 | 115 |
| 1,254 | 257,951 | | | 5 | 480 | 22,687 | 460 | 2,993 | 9,214 | 10,020 | 388,768 | 387,344 | 1,424 | 957,633 | 116 |
| 95 | 19,763 | 25 | 3,742 | 25 | 2,181 | 4,455 | 75 | 1,337 | 2,993 | | 131,028 | 129,837 | 1,191 | 195,529 | 117 |
| 619 | 135,043 | | | 16 | 2,000 | 8,346 | 345 | 1,009 | 1,692 | 300 | 135,048 | 131,844 | 3,204 | 369,405 | 118 |
| 245 | 58,918 | 10 | 2,000 | 8 | 1,500 | 7,435 | 1,785 | 1,625 | 4,025 | | 224,387 | 218,151 | 6,236 | 382,009 | 119 |
| 1,038 | 212,508 | 5 | 704 | 6 | 298 | 17,146 | 3,917 | 1,951 | 7,198 | 4,080 | 256,062 | 246,570 | 9,492 | 708,388 | 120 |
| 15 | 3,088 | | | | | 298 | 90 | 91 | 117 | | 17,814 | 17,647 | 167 | 23,882 | 121 |
| 509 | 130,392 | 201 | 35,545 | 224 | 24,408 | 48,949 | 3,772 | 7,166 | 37,781 | 230 | 691,050 | 667,165 | 23,885 | 1,148,168 | 122 |
| 23 | 4,118 | | | | | 408 | 100 | 173 | 135 | | 13,889 | 13,464 | 425 | 23,538 | 123 |
| 17 | 3,093 | | | | | 254 | 25 | 103 | 103 | | 26,043 | 26,013 | 30 | 36,463 | 124 |
| 88 | 22,148 | 14 | 4,510 | 11 | 1,749 | 7,746 | 850 | 1,309 | 6,037 | | 105,090 | 102,592 | 2,558 | 162,126 | 125 |
| 339 | 89,022 | 246 | 42,753 | 145 | 15,484 | 49,706 | 298 | 5,801 | 43,357 | 250 | 841,105 | 831,178 | 10,017 | 1,249,261 | 126 |
| 378 | 85,081 | 175 | 26,188 | 192 | 14,830 | 42,557 | 743 | 5,972 | 29,706 | 6,136 | 498,396 | 482,314 | 16,082 | 812,729 | 127 |
| 761 | 207,737 | 18 | 4,515 | 21 | 1,789 | 27,942 | 2,078 | 2,750 | 11,314 | 11,800 | 229,766 | 222,440 | 7,326 | 649,972 | 128 |
| 88 | 19,237 | 29 | 6,296 | 20 | 1,899 | 3,951 | 398 | 451 | 3,102 | | 124,852 | 121,123 | 3,724 | 202,447 | 129 |
| 244 | 49,100 | 6 | 1,740 | 9 | 650 | 5,915 | 932 | 1,555 | 3,423 | | 135,507 | 130,395 | 5,112 | 261,681 | 130 |
| 441 | 100,229 | | | 5 | 768 | 3,055 | 828 | 685 | 1,956 | 86 | 93,059 | 91,693 | 1,366 | 268,914 | 131 |
| 10 | 1,407 | | | | | 127 | | 105 | 22 | | 11,472 | 11,327 | 145 | 16,561 | 132 |
| 18 | 2,773 | | | | | 293 | | 185 | 93 | | 37,716 | 37,607 | 109 | 50,762 | 133 |
| 406 | 93,639 | 224 | 35,828 | 229 | 19,298 | 82,475 | 3,460 | 7,351 | 19,964 | 1,700 | 1,143,425 | 1,130,013 | 13,412 | 1,612,388 | 134 |
| 796 | 156,778 | | | 7 | 964 | 9,941 | 1,209 | 1,269 | 7,458 | 5 | 309,253 | 307,923 | 1,330 | 654,179 | 135 |
| 109 | 26,117 | 4 | 925 | | | 4,901 | 1,881 | 1,330 | 1,665 | 25 | 114,997 | 106,263 | 8,734 | 197,924 | 136 |
| 83 | 14,411 | | | | | 694 | | 76 | 183 | | 58,002 | 57,693 | 309 | 107,026 | 137 |
| 889 | 188,567 | 4 | 150 | 17 | 2,067 | 6,026 | 322 | 2,714 | 2,990 | | 342,780 | 341,275 | 1,455 | 769,358 | 138 |

SPECIFIED INDUSTRIES: 1900.

| 66,540 | \$17,582,519 | 10,929 | \$2,015,852 | 6,373 | \$691,700 | \$5,321,330 | \$473,942 | \$640,949 | \$3,993,762 | \$212,077 | \$58,232,202 | \$56,793,904 | \$1,438,238 | \$106,054,527 | 1 |
|--------|--------------|--------|-------------|-------|-----------|-------------|-----------|-----------|-------------|-----------|--------------|--------------|-------------|---------------|----|
| 354 | 99,423 | | | 6 | 528 | 33,864 | 780 | 3,309 | 29,775 | | 437,799 | 429,826 | 8,178 | 737,652 | 2 |
| 8 | 3,510 | 3 | 1,035 | | | 897 | 897 | 115 | 320 | | 14,025 | 14,025 | 5 | 32,540 | 3 |
| 12 | 2,344 | 15 | 2,142 | | | 4,433 | 840 | 573 | 3,220 | | 32,355 | 31,785 | 560 | 115,000 | 4 |
| 26 | 8,220 | 5 | 400 | 13 | 2,550 | 735 | 100 | 170 | 465 | | 4,131 | 3,705 | 485 | 34,035 | 5 |
| 79 | 24,507 | 5 | | 5 | 430 | 12,095 | 8,487 | 1,037 | 2,447 | 124 | 39,130 | 37,515 | 1,615 | 115,345 | 6 |
| 563 | 160,228 | | | 9 | 705 | 33,494 | 23,047 | 4,062 | 6,336 | 449 | 225,675 | 203,277 | 17,398 | 777,521 | 7 |
| 125 | 40,032 | 2 | 354 | 4 | 209 | 16,341 | 13,416 | 571 | 1,354 | | 64,886 | 63,975 | 911 | 197,912 | 8 |
| 190 | 55,600 | 40 | 7,400 | 20 | 3,000 | 7,859 | 1,810 | 1,024 | 5,025 | | 255,695 | 254,445 | 1,250 | 346,256 | 9 |
| 30 | 13,145 | 83 | 14,980 | 10 | 1,000 | 6,654 | 2,320 | 400 | 2,334 | | 26,310 | 25,630 | 680 | 122,195 | 10 |
| 216 | 50,691 | 1 | 195 | 57 | 5,278 | 9,643 | 9,643 | 680 | 8,963 | | 76,249 | 76,080 | 169 | 194,381 | 11 |

TABLE 7.—MANUFACTURES BY

| MANUFACTURING AND MECHANICAL INDUSTRIES. | Number of establishments. | CAPITAL. | | | | | Proprietors and firm members. | SALARIED OFFICIALS, CLERKS, ETC. | | AVERAGE NUMBER OF WAGE-EARNERS AND TOTAL WAGES. | |
|---|---------------------------|------------|-----------|------------|-----------------------------------|--------------------|-------------------------------|----------------------------------|-----------|---|-----------|
| | | Total. | Land. | Buildings. | Machinery, tools, and implements. | Cash and sundries. | | Number. | Salaries. | Total. | |
| | | | | | | | | | | Average number. | Wages. |
| 12 Bread and other bakery products | 62 | \$233,200 | \$45,850 | \$75,400 | \$41,805 | \$70,145 | 64 | 21 | \$13,784 | 241 | \$82,248 |
| 13 Brick and tile | 70 | 1,045,179 | 257,732 | 213,320 | 239,455 | 334,672 | 77 | 59 | 45,745 | 1,701 | 347,297 |
| 14 Brooms and brushes | 14 | 87,825 | 3,920 | 6,925 | 5,015 | 21,965 | 12 | 2 | 1,380 | 81 | 17,980 |
| 15 Carpentering | 87 | 177,383 | 14,825 | 22,690 | 26,945 | 113,073 | 100 | 4 | 3,900 | 848 | 301,426 |
| 16 Carriages and wagons | 132 | 847,426 | 84,698 | 121,334 | 107,339 | 584,055 | 166 | 39 | 31,024 | 830 | 261,856 |
| 17 Cars and general shop construction and repairs by steam railroad companies | 32 | 1,408,592 | 190,110 | 412,414 | 408,005 | 398,063 | | 97 | 98,008 | 3,175 | 1,602,208 |
| 18 Charcoal | 15 | 10,827 | 2,890 | 185 | 1,230 | 6,022 | 20 | 1 | 360 | 87 | 7,470 |
| 19 Cheese, butter, and condensed milk, factory product. | 4 | 13,497 | 450 | 3,100 | 8,910 | 1,037 | 3 | 1 | 400 | 4 | 1,800 |
| 20 Clothing, men's, custom work and repairing. | 73 | 168,656 | 14,950 | 25,550 | 10,961 | 117,195 | 87 | 21 | 20,350 | 284 | 129,843 |
| 21 Clothing, men's, factory product | 18 | 514,060 | 11,840 | 27,700 | 71,251 | 403,269 | 31 | 43 | 37,340 | 1,276 | 230,947 |
| 22 Clothing, women's, dressmaking | 89 | 43,055 | 10,275 | 20,725 | 6,895 | 5,160 | 90 | 4 | 1,765 | 189 | 33,723 |
| 23 Coffins, burial cases, and undertakers' goods. | 4 | 227,635 | 25,525 | 44,760 | 14,450 | 142,900 | 4 | 19 | 20,900 | 109 | 42,300 |
| 24 Confectionery | 27 | 471,680 | 15,900 | 23,500 | 54,982 | 377,298 | 28 | 72 | 61,663 | 419 | 109,561 |
| 25 Cooperage | 23 | 270,353 | 21,095 | 59,675 | 31,180 | 106,403 | 21 | 22 | 22,322 | 408 | 98,607 |
| 26 Cotton, compressing | 10 | 895,468 | 213,094 | 279,952 | 260,284 | 144,138 | 4 | 45 | 41,712 | 505 | 84,307 |
| 27 Cotton, ginning ¹ | 1,178 | 1,312,038 | 57,662 | 329,125 | 1,360,649 | 64,572 | 1,449 | 161 | 15,219 | 1,401 | 207,757 |
| 28 Cotton goods | 67 | 24,158,159 | 1,166,237 | 4,701,906 | 10,823,803 | 7,461,213 | 10 | 332 | 430,501 | 18,233 | 3,566,951 |
| 29 Druggists' preparations, not including prescriptions. | 5 | 57,600 | | | 1,100 | 56,500 | 6 | 6 | 2,100 | 14 | 4,230 |
| 30 Dyeing and cleaning | 24 | 23,334 | 3,550 | 7,400 | 4,520 | 12,864 | 30 | 2 | 800 | 78 | 15,923 |
| 31 Electrical construction and repairs | 6 | 56,850 | 3,000 | | 16,050 | 37,200 | 5 | 9 | 7,660 | 60 | 29,228 |
| 32 Fertilizers | 41 | 6,663,618 | 137,762 | 1,044,804 | 661,134 | 4,819,918 | 39 | 114 | 147,018 | 1,126 | 291,887 |
| 33 Flouring and grist mill products | 1,123 | 2,504,033 | 239,073 | 577,812 | 1,025,920 | 611,224 | 1,315 | 88 | 58,908 | 1,167 | 225,133 |
| 34 Foundry and machine shop products | 87 | 3,393,141 | 327,452 | 465,971 | 691,539 | 1,913,179 | 88 | 177 | 198,734 | 2,381 | 920,331 |
| 35 Fruits and vegetables, canning and preserving. | 8 | 24,801 | 1,851 | 5,700 | 5,500 | 11,750 | 5 | 4 | 3,650 | 81 | 10,545 |
| 36 Furniture, cabinetmaking, repairing, and upholstering. | 42 | 25,262 | 3,100 | 5,275 | 5,925 | 10,962 | 45 | | | 41 | 15,666 |
| 37 Furniture, factory product | 21 | 1,195,948 | 165,400 | 127,667 | 183,794 | 719,087 | 17 | 85 | 90,534 | 1,354 | 353,512 |
| 38 Gas, illuminating and heating | 12 | 4,269,319 | 313,250 | 260,806 | 3,413,216 | 282,047 | | 75 | 56,314 | 271 | 92,265 |
| 39 Hosiery and knit goods | 16 | 923,887 | 21,886 | 85,012 | 416,329 | 405,710 | | 46 | 39,467 | 1,203 | 200,062 |
| 40 Ice, artificial | 32 | 975,100 | 63,950 | 128,988 | 724,050 | 58,112 | 14 | 48 | 42,635 | 251 | 86,210 |
| 41 Iron and steel | 3 | 655,916 | 175,000 | 295,000 | 113,880 | 72,036 | | 18 | 13,295 | 194 | 48,391 |
| 42 Leather, tanned, curried, and finished | 36 | 1,434,390 | 56,270 | 210,520 | 265,820 | 901,780 | 38 | 26 | 20,413 | 410 | 92,030 |
| 43 Lime and cement | 5 | 130,949 | 89,000 | 9,210 | 24,760 | 7,979 | 4 | 4 | 4,215 | 103 | 25,320 |
| 44 Liquors, distilled | 23 | 54,808 | 3,485 | 10,350 | 17,000 | 23,973 | 29 | 4 | 1,320 | 42 | 8,557 |
| 45 Liquors, malt | 5 | 1,827,330 | 200,500 | 323,852 | 323,380 | 480,098 | | 37 | 64,300 | 300 | 123,288 |
| 46 Liquors, vinous | 6 | 38,360 | 240 | 5,900 | 6,320 | 25,900 | 4 | 3 | 1,350 | 6 | 1,225 |
| 47 Lock and gun smithing | 19 | 15,765 | 3,500 | 1,150 | 7,905 | 3,210 | 22 | | | 12 | 2,452 |
| 48 Looking-glass and picture frames | 14 | 16,835 | | | 1,735 | 15,100 | 17 | 4 | 2,010 | 26 | 9,582 |
| 49 Lumber and timber products | 1,254 | 11,802,716 | 4,044,247 | 751,547 | 4,773,750 | 2,233,172 | 1,697 | 414 | 268,646 | 10,240 | 2,314,523 |
| 50 Lumber, planing mill products, including sash, doors, and blinds. | 99 | 2,074,226 | 244,330 | 254,925 | 640,108 | 934,363 | 100 | 150 | 146,020 | 2,171 | 672,243 |
| 51 Marble and stone work | 23 | 590,542 | 142,140 | 54,885 | 137,040 | 255,377 | 23 | 25 | 27,275 | 574 | 233,026 |
| 52 Masonry, brick and stone | 30 | 89,011 | 7,500 | 13,200 | 16,206 | 52,105 | 32 | 9 | 5,770 | 594 | 227,836 |
| 53 Mattresses and spring beds | 10 | 114,170 | 3,600 | 1,800 | 22,940 | 85,830 | 10 | 21 | 22,313 | 74 | 30,188 |
| 54 Millinery and lace goods | 3 | 18,200 | | | 3,500 | 14,700 | 4 | 16 | 8,690 | 62 | 20,389 |
| 55 Millinery, custom work | 181 | 261,232 | 13,260 | 36,450 | 8,851 | 202,671 | 213 | 42 | 16,000 | 279 | 82,059 |
| 56 Mineral and soda waters | 38 | 130,961 | 5,700 | 4,775 | 66,335 | 54,151 | 41 | 29 | 17,590 | 91 | 22,045 |
| 57 Monuments and tombstones | 41 | 163,198 | 9,432 | 7,185 | 17,115 | 134,466 | 51 | 26 | 16,480 | 303 | 124,536 |
| 58 Oil, cottonseed and cake | 43 | 4,098,663 | 235,853 | 683,532 | 1,428,334 | 1,750,949 | 7 | 195 | 187,164 | 1,591 | 354,017 |
| 59 Optical goods | 3 | 37,050 | | | 2,750 | 34,300 | 4 | | | 12 | 8,800 |
| 60 Painting, house, sign, etc | 47 | 32,645 | 2,750 | 4,575 | 7,075 | 18,245 | 52 | 2 | 1,380 | 132 | 66,336 |
| 61 Paints | 5 | 101,300 | 4,000 | 4,500 | 11,500 | 81,300 | 3 | 12 | 9,170 | 23 | 9,344 |
| 62 Paper hanging | 5 | 23,240 | | | 890 | 22,350 | 6 | 7 | 4,784 | 23 | 8,540 |
| 63 Patent medicines and compounds | 22 | 498,560 | 29,756 | 77,268 | 28,725 | 362,811 | 13 | 38 | 31,958 | 173 | 44,340 |
| 64 Paving and paving materials | 3 | 35,189 | 7,100 | 5,200 | 12,229 | 10,660 | | 11 | 5,175 | 40 | 16,535 |
| 65 Photography | 64 | 59,793 | 2,805 | 6,762 | 31,105 | 19,121 | 74 | 3 | 800 | 49 | 14,752 |
| 66 Plumbing, and gas and steam fitting | 56 | 247,002 | 13,100 | 19,550 | 22,205 | 192,147 | 63 | 26 | 17,543 | 423 | 161,350 |
| 67 Pottery, terra cotta, and fire-clay products. | 21 | 266,710 | 38,125 | 80,415 | 63,110 | 95,060 | 23 | 21 | 17,800 | 285 | 66,795 |
| 68 Printing and publishing, book and job. | 51 | 635,150 | 32,700 | 18,300 | 417,293 | 166,857 | 66 | 49 | 41,916 | 811 | 241,745 |
| 69 Printing and publishing, newspapers and periodicals. | 233 | 1,352,313 | 113,635 | 165,112 | 1,249,133 | 324,933 | 234 | 196 | 177,325 | 1,050 | 450,878 |
| 70 Rice, cleaning and polishing | 4 | 113,155 | 30,085 | 40,075 | 20,775 | 22,220 | 4 | 6 | 4,800 | 14 | 8,250 |
| 71 Roofing and roofing materials | 11 | 90,235 | 10,500 | 21,500 | 22,700 | 35,535 | 12 | 9 | 5,950 | 87 | 33,507 |
| 72 Saddlery and harness | 78 | 493,454 | 20,726 | 51,315 | 63,849 | 357,564 | 93 | 41 | 21,535 | 651 | 141,900 |
| 73 Sewing machine repairing | 4 | 1,040 | | | 555 | 485 | 3 | | | 2 | 400 |
| 74 Ship and boat building, wooden | 4 | 15,170 | | | 770 | 14,400 | 2 | 2 | 1,400 | 19 | 5,156 |
| 75 Slaughtering and meat packing, wholesale. | 4 | 109,400 | 13,500 | 27,700 | 24,700 | 43,500 | 4 | 32 | 19,625 | 98 | 31,050 |
| 76 Slaughtering, wholesale, not including meat packing. | 3 | 6,427 | 3,200 | 1,325 | 102 | 1,800 | 4 | 2 | 610 | 6 | 1,390 |

¹ Does not include many ginneries operated in connection with saw, grist, and cottonseed-oil mills, or for the use exclusively of plantations on which they are located. For the full number of ginneries in operation, reference should be made to the special report on cotton ginning.

SPECIFIED INDUSTRIES: 1900—Continued.

| AVERAGE NUMBER OF WAGE-EARNERS AND TOTAL WAGES—continued. | | | | | | MISCELLANEOUS EXPENSES. | | | | | COST OF MATERIALS USED. | | | Value of products, including custom work and repairing. | |
|---|-----------|---------------------------|-----------|---------------------------|---------|-------------------------|----------------|--|---------------------------------|----------------|-------------------------|---|----------------------------------|---|----|
| Men, 16 years and over. | | Women, 16 years and over. | | Children, under 16 years. | | Total. | Rent of works. | Taxes, not including internal revenue. | Rent of offices, interest, etc. | Contract work. | Total. | Principal materials, including mill supplies and freight. | Fuel and rent of power and heat. | | |
| Average number. | Wages. | Average number. | Wages. | Average number. | Wages. | | | | | | | | | | |
| 201 | \$76,616 | 20 | \$3,736 | 20 | \$1,896 | \$26,504 | \$12,411 | \$3,043 | \$11,050 | | \$290,557 | \$288,244 | \$7,813 | \$597,549 | 12 |
| 1,633 | 841,099 | 2 | 500 | 66 | 5,696 | 44,687 | 9,505 | 6,678 | 28,104 | \$100 | 264,016 | 65,205 | 198,811 | 1,053,255 | 13 |
| 79 | 17,860 | | | 2 | 120 | 1,833 | 892 | 435 | 506 | | 60,382 | 69,132 | 250 | 117,260 | 14 |
| 848 | 301,426 | | | | 800 | 21,960 | 5,577 | 1,676 | 8,714 | 5,993 | 604,900 | 603,957 | 943 | 1,112,725 | 15 |
| 822 | 261,056 | | | 8 | | 45,092 | 10,420 | 8,339 | 26,163 | 120 | 545,587 | 533,707 | 11,880 | 1,350,644 | 16 |
| 8,169 | 1,601,128 | 6 | 1,080 | | | 89,380 | 1,800 | 16,472 | 69,931 | 1,174 | 1,272,692 | 1,257,533 | 16,159 | 8,062,283 | 17 |
| 85 | 7,370 | | | 2 | 100 | 2,277 | 90 | 61 | 326 | 1,800 | 10,120 | 10,120 | | 41,832 | 18 |
| 4 | 1,860 | | | | | 860 | | 72 | 288 | | 10,516 | 9,964 | 551 | 14,166 | 19 |
| 211 | 112,485 | 65 | 16,786 | 8 | 622 | 27,293 | 15,167 | 1,980 | 9,871 | 275 | 171,542 | 169,611 | 1,931 | 437,118 | 20 |
| 119 | 44,408 | 1,088 | 178,070 | 74 | 8,469 | 25,200 | 9,962 | 2,915 | 12,273 | 50 | 657,352 | 649,882 | 7,470 | 1,120,607 | 21 |
| | | 185 | 33,438 | 4 | 285 | 6,344 | 5,314 | 547 | 483 | | 96,637 | 96,432 | 205 | 188,582 | 22 |
| 94 | 89,300 | 15 | 3,000 | 15 | 3,000 | 5,546 | 480 | 1,516 | 8,550 | | 76,505 | 74,650 | 1,855 | 203,760 | 23 |
| 238 | 80,994 | 165 | 26,555 | 16 | 2,012 | 60,550 | 14,718 | 4,453 | 41,379 | | 534,244 | 524,405 | 9,839 | 864,560 | 24 |
| 394 | 97,735 | 14 | 872 | 14 | 872 | 24,042 | 2,166 | 1,495 | 13,581 | 6,800 | 392,244 | 391,227 | 1,017 | 678,092 | 25 |
| 505 | 84,307 | | | | | 68,453 | 15,000 | 13,123 | 35,330 | | 48,421 | 25,480 | 18,441 | 845,017 | 26 |
| 1,398 | 207,460 | 3 | 297 | 3 | 297 | 34,615 | 2,877 | 15,436 | 16,302 | | 281,562 | 161,509 | 70,053 | 1,120,264 | 27 |
| 7,309 | 1,815,126 | 6,495 | 1,270,434 | 4,479 | 481,391 | 1,041,863 | 178,564 | 178,564 | 831,920 | 31,379 | 11,118,356 | 10,794,699 | 318,657 | 18,467,615 | 28 |
| 6 | 2,856 | 6 | 1,208 | 2 | 175 | 4,996 | 1,736 | 1,885 | 1,375 | | 70,930 | 68,385 | 2,545 | 96,626 | 29 |
| 52 | 18,012 | 6 | 1,315 | 20 | 1,596 | 5,845 | 4,220 | 323 | 1,202 | 100 | 80,777 | 29,778 | 999 | 67,791 | 30 |
| 59 | 29,078 | | | 1 | 150 | 6,292 | 8,820 | 315 | 1,607 | 550 | 64,289 | 63,740 | 540 | 130,910 | 31 |
| 1,121 | 293,887 | | | 5 | 1,000 | 405,936 | 4,261 | 36,174 | 365,376 | 125 | 2,349,635 | 2,296,942 | 52,693 | 3,367,353 | 32 |
| 1,164 | 225,223 | | | 18 | 710 | 78,455 | 8,050 | 23,120 | 42,113 | 172 | 7,004,065 | 6,955,025 | 49,040 | 8,330,439 | 33 |
| 2,360 | 916,408 | 1 | 300 | 23 | 3,568 | 178,903 | 8,165 | 30,095 | 130,123 | 5,580 | 1,590,884 | 1,539,732 | 51,142 | 3,506,427 | 34 |
| 26 | 5,260 | 38 | 4,410 | 17 | 875 | 4,262 | 600 | 221 | 3,441 | | 67,192 | 60,609 | 493 | 120,022 | 35 |
| 33 | 15,266 | | | 3 | 400 | 8,621 | 2,639 | 384 | 548 | 50 | 16,380 | 16,235 | 145 | 62,194 | 36 |
| 1,154 | 334,943 | 48 | 7,230 | 152 | 16,839 | 93,702 | 8,106 | 4,580 | 80,766 | 250 | 517,466 | 512,927 | 4,539 | 1,273,462 | 37 |
| 271 | 92,265 | | | | | 185,602 | 24,000 | 24,140 | 137,462 | | 141,507 | 135,109 | 6,398 | 660,812 | 38 |
| 217 | 64,148 | 682 | 104,754 | 309 | 31,760 | 72,631 | 910 | 5,353 | 55,496 | 10,872 | 757,430 | 746,536 | 10,894 | 1,230,801 | 39 |
| 250 | 86,030 | | | 1 | 180 | 49,654 | 2,005 | 8,266 | 38,373 | 450 | 126,512 | 126,512 | 80,681 | 456,904 | 40 |
| 188 | 47,959 | 6 | 432 | 6 | 432 | 8,800 | | 1,766 | 6,884 | 150 | 237,421 | 111,483 | 125,938 | 391,539 | 41 |
| 408 | 91,980 | | | 2 | 50 | 24,724 | 1,620 | 3,989 | 19,115 | | 928,129 | 924,868 | 3,261 | 1,187,697 | 42 |
| 103 | 25,320 | | | | | 1,135 | | 416 | 719 | | 19,893 | 12,214 | 7,679 | 62,519 | 43 |
| 42 | 3,557 | | | | | 195,192 | 296 | 1,188 | 133,698 | | 39,695 | 35,242 | 4,453 | 198,891 | 44 |
| 300 | 128,288 | | | | | 410,745 | | 9,903 | 400,842 | | 275,747 | 234,807 | 40,940 | 973,212 | 45 |
| 6 | 1,225 | | | | | 3,482 | 120 | 160 | 3,262 | | 7,815 | 7,765 | 50 | 16,875 | 46 |
| 7 | 1,780 | 1 | 240 | 4 | 432 | 4,567 | 2,637 | 787 | 1,193 | | 7,421 | 6,887 | 534 | 25,653 | 47 |
| 26 | 9,582 | | | | | 4,897 | 3,454 | 241 | 1,137 | 95 | 25,288 | 25,288 | 30 | 57,935 | 48 |
| 10,108 | 2,330,622 | 11 | 1,800 | 121 | 12,101 | 249,686 | 15,476 | 63,942 | 170,598 | 9,600 | 6,665,897 | 6,665,487 | 460 | 18,704,923 | 49 |
| 2,139 | 667,145 | 1 | 500 | 31 | 4,698 | 102,159 | 13,144 | 19,040 | 64,975 | 5,000 | 2,280,495 | 2,268,634 | 11,841 | 4,302,976 | 50 |
| 562 | 281,326 | | | 12 | 1,700 | 41,528 | 2,878 | 1,614 | 27,041 | 10,600 | 162,759 | 161,891 | 10,868 | 551,983 | 51 |
| 594 | 227,836 | | | | | 6,240 | 1,693 | 1,021 | 3,526 | | 584,744 | 534,592 | 152 | 865,017 | 52 |
| 61 | 27,150 | 12 | 2,918 | 1 | 120 | 7,821 | 3,732 | 1,168 | 2,921 | | 150,325 | 148,910 | 1,415 | 238,028 | 53 |
| 6 | 1,260 | 47 | 18,428 | 9 | 700 | 4,210 | 2,775 | 550 | 885 | | 58,710 | 58,710 | 255 | 113,500 | 54 |
| 3 | 625 | 267 | 80,123 | 9 | 1,311 | 40,501 | 28,010 | 3,149 | 9,336 | 6 | 380,731 | 380,235 | 496 | 685,783 | 55 |
| 82 | 21,116 | | | 9 | 929 | 14,973 | 4,881 | 1,167 | 8,975 | | 65,608 | 64,935 | 613 | 196,599 | 56 |
| 303 | 124,536 | | | | | 11,312 | 5,281 | 2,078 | 8,758 | 200 | 203,907 | 202,245 | 1,662 | 487,722 | 57 |
| 1,681 | 352,875 | 1 | 115 | 9 | 1,027 | 312,936 | 100 | 23,727 | 282,959 | 1,200 | 6,229,486 | 6,106,840 | 122,646 | 8,004,112 | 58 |
| 11 | 8,200 | 1 | 600 | | | 4,425 | 2,100 | 185 | 2,140 | | 22,205 | 22,090 | 115 | 58,500 | 59 |
| 177 | 66,011 | | | 5 | 375 | 6,266 | 3,922 | 655 | 1,639 | | 72,456 | 72,373 | 83 | 195,920 | 60 |
| 19 | 8,704 | 1 | 600 | 3 | 540 | 10,905 | 2,720 | 1,360 | 6,826 | | 112,474 | 111,522 | 952 | 182,279 | 61 |
| 23 | 8,540 | | | | | 4,388 | 2,610 | 463 | 510 | 800 | 80,392 | 39,880 | 12 | 71,475 | 62 |
| 87 | 27,156 | 87 | 16,654 | 4 | 530 | 281,676 | 5,366 | 13,604 | 262,706 | | 487,037 | 484,998 | 2,039 | 1,150,802 | 63 |
| 40 | 16,535 | | | | | 715 | 450 | 90 | 175 | | 16,539 | 16,185 | 354 | 63,607 | 64 |
| 27 | 10,684 | 16 | 3,479 | 6 | 589 | 13,625 | 10,060 | 1,435 | 2,000 | 130 | 33,595 | 33,374 | 221 | 120,974 | 65 |
| 420 | 101,038 | 3 | 312 | 3 | 312 | 20,713 | 12,611 | 3,164 | 4,938 | | 417,126 | 414,943 | 2,181 | 774,326 | 66 |
| 279 | 66,156 | 1 | 75 | 5 | 564 | 15,587 | 861 | 2,051 | 13,150 | 25 | 42,273 | 17,275 | 24,998 | 203,322 | 67 |
| 583 | 207,693 | 198 | 30,594 | 30 | 3,458 | 46,243 | 19,230 | 5,403 | 18,421 | 3,139 | 242,669 | 234,074 | 8,595 | 693,726 | 68 |
| 774 | 406,365 | 110 | 27,190 | 166 | 17,323 | 243,417 | 23,433 | 13,364 | 167,669 | 33,901 | 370,920 | 349,288 | 21,632 | 1,687,019 | 69 |
| 14 | 8,250 | | | | | 2,690 | 100 | 1,306 | 1,284 | | 161,070 | 159,535 | 1,535 | 184,804 | 70 |
| 87 | 33,607 | | | | | 10,015 | 2,504 | 599 | 4,912 | 2,000 | 123,362 | 123,362 | 762 | 213,623 | 71 |
| 540 | 126,187 | 16 | 2,490 | 95 | 13,223 | 35,591 | 12,882 | 3,476 | 18,667 | 506 | 820,062 | 815,745 | 4,317 | 1,249,885 | 72 |
| 2 | 400 | | | | | 366 | 336 | 30 | | | 805 | 805 | | 3,000 | 73 |
| 19 | 5,156 | | | | | 680 | 10 | 25 | 300 | 345 | 12,050 | 12,050 | | 23,500 | 74 |
| 97 | 30,800 | | | 1 | 250 | 10,745 | 860 | 1,360 | 8,525 | | 456,855 | 456,955 | 2,400 | 567,381 | 75 |
| 5 | 1,315 | 1 | 75 | | | 489 | 60 | 29 | 400 | | 27,340 | 27,340 | | 33,396 | 76 |

TABLE 7.—MANUFACTURES BY

| MANUFACTURING AND MECHANICAL INDUSTRIES. | Number of establishments. | CAPITAL. | | | | | Proprietors and firm members. | SALARIED OFFICIALS, CLERKS, ETC. | | AVERAGE NUMBER OF WAGE-EARNERS AND TOTAL WAGES. | |
|---|---------------------------|-----------|-----------|------------|-----------------------------------|--------------------|-------------------------------|----------------------------------|-----------|---|-----------|
| | | Total. | Land. | Buildings. | Machinery, tools, and implements. | Cash and sundries. | | Number. | Salaries. | Total. | |
| | | | | | | | | | | Average number. | Wages. |
| 77 Sugar and molasses, refining..... | 9 | \$32,895 | \$20 | \$40 | \$11,330 | \$21,605 | 12 | 4 | \$3,044 | 20 | \$1,502 |
| 78 Tinsmithing, coppersmithing, and sheet-iron working. | 52 | 458,089 | 50,950 | 38,930 | 50,545 | 317,614 | 56 | 30 | 23,500 | 303 | 103,114 |
| 79 Tobacco, cigars, and cigarettes..... | 34 | 55,673 | 6,170 | 3,110 | 2,915 | 43,478 | 36 | 7 | 2,795 | 106 | 35,438 |
| 80 Trunks and valises..... | 7 | 45,879 | | | 2,859 | 43,020 | 7 | 14 | 12,930 | 92 | 32,580 |
| 81 Turpentine and rosin..... | 524 | 3,785,432 | 1,496,829 | 353,120 | 559,992 | 1,378,491 | 815 | 768 | 320,265 | 19,199 | 3,772,818 |
| 82 Typewriter repairing..... | 3 | 31,163 | | | 2,000 | 29,163 | 1 | 3 | 2,300 | 14 | 9,930 |
| 83 Vinegar and cider..... | 8 | 17,335 | | 200 | 1,935 | 15,200 | 4 | 4 | 5,200 | 12 | 3,100 |
| 84 Watch, clock, and jewelry repairing..... | 123 | 98,685 | 7,200 | 16,175 | 85,640 | 39,650 | 131 | 4 | 836 | 66 | 31,972 |
| 85 Wood, turned and carved..... | 6 | 17,030 | 2,090 | 2,625 | 10,375 | 1,940 | 8 | | | 43 | 7,425 |
| 86 Woolen goods..... | 14 | 455,114 | 32,065 | 61,895 | 198,185 | 162,969 | 1 | 13 | 16,936 | 561 | 97,169 |
| 87 All other industries ¹ | 65 | 3,307,564 | 168,830 | 402,807 | 1,111,042 | 1,624,885 | 52 | 195 | 205,548 | 2,619 | 671,986 |

¹ Embraces bags, paper, 2; belting and hose, leather, 1; bottling, 1; brass castings and brass finishing, 1; carriage and wagon materials, 1; cars and general shop construction and repairs by street railroad companies, 2; cars, steam railroad, not including operations of railroad companies, 2; coke, 2; coning and twine, 1; cotton small wares, 1; cotton waste, 1; cutlery and edge tools, 1; electrical apparatus and supplies, 1; electroplating, 1; engraving, steel, including plate printing, 2; fancy articles, not elsewhere specified, 1; food preparations, 1; furnishing goods, men's, 2; gas machines and meters, 1; glass, 1; glass, cutting, staining, and ornamenting, 1; grease and tallow, 1; hand stamps, 2; hats and caps, not including fur hats, and wool hats, 2; house furnishing goods, not elsewhere specified, 1;

TABLE 8.—MANUFACTURES IN CITIES

ATLANTA.

| | | \$16,085,114 | \$1,219,144 | \$1,694,606 | \$6,745,921 | \$6,395,443 | 391 | 780 | \$851,801 | 9,334 | \$3,106,039 |
|--|-----|--------------|-------------|-------------|-------------|-------------|-----|-----|-----------|-------|-------------|
| 1 All industries..... | 395 | | | | | | | | | | |
| 2 Bicycle and tricycle repairing..... | 8 | 6,020 | | | 3,520 | 2,500 | 8 | 6 | 3,886 | 18 | 5,192 |
| 3 Blacksmithing and wheelwrighting..... | 25 | 20,865 | 10,500 | 1,100 | 4,788 | 4,467 | 31 | | | 57 | 21,930 |
| 4 Boots and shoes, custom work and repairing..... | 48 | 5,893 | | 50 | 1,704 | 4,139 | 49 | | | 38 | 12,591 |
| 5 Boxes, fancy and paper..... | 3 | 72,017 | 5,000 | | 22,964 | 44,053 | 4 | 12 | 13,576 | 123 | 29,125 |
| 6 Bread and other bakery products..... | 13 | 79,900 | 9,100 | 16,600 | 20,650 | 33,550 | 13 | 9 | 9,554 | 90 | 28,711 |
| 7 Carpentering..... | 10 | 71,843 | | | 9,825 | 62,018 | 16 | | | 317 | 121,604 |
| 8 Carriages and wagons..... | 6 | 52,525 | 6,000 | 7,000 | 4,025 | 35,500 | 7 | 7 | 4,900 | 82 | 31,300 |
| 9 Clothing, men's, custom work and repairing..... | 11 | 17,410 | | | 1,310 | 16,100 | 18 | 3 | 4,200 | 51 | 30,416 |
| 10 Clothing, men's, factory product..... | 7 | 226,105 | | | 37,500 | 188,605 | 16 | 11 | 12,790 | 801 | 156,398 |
| 11 Confectionery..... | 6 | 334,250 | | | 39,250 | 295,000 | 9 | 38 | 34,123 | 259 | 63,602 |
| 12 Cotton goods..... | 3 | 3,461,378 | 161,655 | 641,152 | 1,601,984 | 1,056,682 | | 33 | 61,105 | 1,776 | 417,246 |
| 13 Dyeing and cleaning..... | 6 | 7,720 | 1,000 | 4,000 | 1,480 | 1,240 | 7 | | | 22 | 6,420 |
| 14 Electrical construction and repairs..... | 4 | 42,000 | 3,000 | | 14,500 | 24,500 | 2 | 7 | 7,900 | 49 | 21,100 |
| 15 Fertilizers..... | 3 | 672,482 | 21,000 | 116,000 | 60,000 | 476,482 | | 14 | 30,462 | 145 | 38,721 |
| 16 Foundry and machine shop products..... | 17 | 1,193,756 | 125,000 | 100,800 | 195,178 | 772,778 | 10 | 59 | 73,450 | 602 | 285,832 |
| 17 Furniture, cabinetmaking, repairing, and upholstering..... | 3 | 5,075 | | | 1,200 | 3,875 | 4 | | | 5 | 3,216 |
| 18 Furniture, factory product..... | 5 | 781,685 | 145,000 | 70,000 | 88,900 | 477,785 | 1 | 81 | 45,460 | 533 | 173,550 |
| 19 Ice, artificial..... | 4 | 227,238 | 10,500 | 17,133 | 186,600 | 13,000 | | 8 | 10,100 | 32 | 14,946 |
| 20 Lock and gun smithing..... | 7 | 7,165 | 2,500 | 1,000 | 3,505 | 160 | 8 | | | 4 | 1,070 |
| 21 Lumber and timber products..... | 5 | 39,958 | 32,333 | 1,775 | 5,150 | 700 | 5 | | | 12 | 2,050 |
| 22 Lumber, planing mill products, including sash, doors, and blinds..... | 6 | 397,700 | 103,000 | 58,000 | 80,700 | 156,000 | 3 | 44 | 56,140 | 521 | 186,400 |
| 23 Millinery and lace goods..... | 3 | 18,200 | | | 3,500 | 14,700 | 4 | 16 | 8,690 | 62 | 20,388 |
| 24 Millinery, custom work..... | 6 | 22,281 | 500 | 2,000 | 630 | 19,151 | 4 | 14 | 4,500 | 45 | 18,171 |
| 25 Mineral and soda waters..... | 4 | 52,175 | | | 16,700 | 35,475 | 1 | 18 | 10,090 | 13 | 8,470 |
| 26 Monuments and tombstones..... | 7 | 24,760 | | | 4,325 | 20,425 | 6 | 1 | 1,200 | 73 | 81,728 |
| 27 Painting, house, sign, etc..... | 6 | 9,265 | | | 1,280 | 7,985 | 7 | | | 9 | 12,540 |
| 28 Paints..... | 5 | 101,300 | 4,000 | 4,500 | 11,500 | 81,800 | 3 | 12 | 9,170 | 23 | 9,814 |
| 29 Paper hanging..... | 4 | 21,575 | | | 875 | 20,700 | 5 | 6 | 4,610 | 17 | 6,200 |
| 30 Patent medicines and compounds..... | 10 | 429,935 | 27,756 | 78,268 | 23,400 | 305,511 | 8 | 27 | 25,313 | 123 | 32,376 |
| 31 Photography..... | 3 | 5,075 | | | 3,800 | 1,275 | 3 | | | 9 | 2,172 |
| 32 Plumbing, and gas and steam fitting..... | 14 | 59,180 | | | 5,880 | 47,300 | 15 | 8 | 6,200 | 135 | 49,320 |
| 33 Printing and publishing, book and job..... | 17 | 365,085 | 25,000 | 10,000 | 248,050 | 82,035 | 19 | 81 | 28,160 | 409 | 150,562 |
| 34 Printing and publishing, newspapers and periodicals..... | 16 | 984,845 | 60,000 | 66,000 | 792,257 | 96,588 | 11 | 68 | 87,165 | 160 | 124,986 |
| 35 Saddlery and harness..... | 9 | 31,670 | | | 3,800 | 27,870 | 10 | | | 23 | 10,778 |
| 36 Tinsmithing, coppersmithing, and sheet-iron working..... | 8 | 311,289 | 20,000 | 30,000 | 39,685 | 227,604 | 8 | 27 | 21,900 | 170 | 41,540 |
| 37 Tobacco, cigars and cigarettes..... | 10 | 17,753 | | | 1,060 | 16,693 | 12 | 4 | 1,415 | 33 | 13,946 |
| 38 Typewriter repairing..... | 3 | 31,163 | | | 2,000 | 29,163 | 1 | 3 | 2,300 | 14 | 9,930 |
| 39 Watch, clock, and jewelry repairing..... | 9 | 4,270 | | | 2,250 | 2,020 | 11 | | | 4 | 2,200 |
| 40 All other industries ¹ | 61 | 5,878,333 | 476,300 | 474,223 | 3,236,196 | 1,691,614 | 62 | 263 | 274,042 | 2,484 | 919,523 |

¹ Embraces agricultural implements, 1; awnings, tents, and sails, 1; bags, paper, 2; belting and hose, leather, 1; boots and shoes, factory product, 1; boxes, wooden packing, 1; brooms and brushes, 2; cars and general shop construction and repairs by steam railroad companies, 2; clothing, women's, dressmaking, 1; collars, burial cases, and undertakers' goods, 2; cotton, compressing, 1; electroplating, 1; engraving, steel, including plate printing, 2; flouring and grist mill products, 1; fruits and vegetables, canning and preserving, 1; furnishing goods, men's, 1; gas, illuminating and heating, 2; glass, cutting, staining, and ornamenting, 1; hand stamps, 2; hats and caps, not including fur hats, and wool hats, 2; hosiery and knit goods, 2; ironwork, architectural and ornamental, 1; leather goods, 1;

SPECIFIED INDUSTRIES: 1900—Continued.

| AVERAGE NUMBER OF WAGE-EARNERS AND TOTAL WAGES—continued. | | | | | | MISCELLANEOUS EXPENSES. | | | | | COST OF MATERIALS USED. | | | Value of products, including custom work and repairing. | |
|---|-----------|---------------------------|---------|---------------------------|---------|-------------------------|----------------|--|---------------------------------|----------------|-------------------------|---|----------------------------------|---|----|
| Men, 16 years and over. | | Women, 16 years and over. | | Children, under 16 years. | | Total. | Rent of works. | Taxes, not including internal revenue. | Rent of offices, interest, etc. | Contract work. | Total. | Principal materials, including mill supplies and freight. | Fuel and rent of power and heat. | | |
| Average number. | Wages. | Average number. | Wages. | Average number. | Wages. | | | | | | | | | | |
| 19 | \$4,310 | 1 | \$192 | | | \$2,315 | \$1,430 | \$288 | \$602 | | \$74,631 | \$78,797 | \$834 | \$106,700 | 77 |
| 276 | 99,140 | | | 27 | \$8,974 | 14,801 | 6,787 | 8,736 | 4,278 | | 571,553 | 568,894 | 2,719 | 796,430 | 78 |
| 87 | 32,033 | 10 | 2,692 | 9 | 713 | 19,839 | 3,833 | 821 | 15,185 | | 51,418 | 51,270 | 148 | 125,058 | 79 |
| 87 | 32,100 | | | 5 | 480 | 15,303 | 7,340 | 488 | 7,475 | | 92,615 | 91,910 | 705 | 189,318 | 80 |
| 19,028 | 3,754,972 | 49 | 5,303 | 122 | 12,573 | 178,774 | 1,938 | 26,714 | 80,681 | \$93,381 | 2,292,565 | 2,297,532 | 25,133 | 8,110,468 | 81 |
| 11 | 9,030 | 3 | 900 | | | 14,608 | 1,548 | 10 | 12,050 | 1,000 | 41,155 | 41,155 | | 84,200 | 82 |
| 12 | 8,100 | | | | | 1,857 | 1,200 | 7 | 650 | | 14,910 | 14,910 | | 72,665 | 83 |
| 61 | 34,287 | | | 5 | 735 | 19,837 | 16,121 | 1,332 | 2,964 | 480 | 84,043 | 83,893 | 650 | 163,433 | 84 |
| 40 | 7,050 | | | 3 | 375 | 1,851 | 5 | 139 | 1,707 | | 8,760 | 8,560 | 200 | 25,200 | 85 |
| 284 | 55,013 | 189 | 31,720 | 88 | 10,426 | 22,430 | | 3,012 | 18,455 | 963 | 280,235 | 278,948 | 6,347 | 491,001 | 86 |
| 1,492 | 438,344 | 955 | 112,842 | 202 | 25,800 | 211,928 | 28,335 | 21,120 | 160,080 | 7,343 | 2,688,543 | 2,646,066 | 42,477 | 4,158,375 | 87 |

ironwork, architectural and ornamental, 2; kaolin and other earth grinding, 1; leather goods, 1; oil, not elsewhere specified, 1; oysters, canning and preserving, 1; paper and wood pulp, 2; paper goods, not elsewhere specified, 1; photographic materials, 1; photolithography and photoengraving, 1; pickles, preserves, and sauces, 1; printing materials, 1; refrigerators, 1; saws, 1; scales and balances, 1; shirts, 2; shoddy, 1; show cases, 1; soap and candles, 1; steam fittings and heating apparatus, 1; stencils and brands, 2; stereotyping and electrotyping, 2; surgical appliances, 1; tobacco, stemming and rehandling, 1; typewriters and supplies, 1; umbrellas and canes, 2; wirework, including wire rope and cable, 1.

BY SPECIFIED INDUSTRIES: 1900.

ATLANTA.

| | | | | | | | | | | | | | | | |
|-------|-------------|-------|-----------|-----|-----------|-------------|-----------|----------|-------------|----------|-------------|-------------|-----------|--------------|----|
| 6,454 | \$2,574,280 | 2,120 | \$421,777 | 785 | \$106,982 | \$1,352,721 | \$149,904 | \$92,983 | \$1,055,838 | \$53,990 | \$8,571,194 | \$8,408,017 | \$163,177 | \$16,721,899 | 1 |
| 16 | 4,952 | | | 2 | 180 | 2,352 | 1,934 | 93 | 325 | | 7,990 | 7,416 | 583 | 23,700 | 2 |
| 56 | 21,840 | | | 1 | 96 | 5,648 | 4,312 | 252 | 1,084 | | 19,401 | 18,270 | 1,131 | 61,225 | 3 |
| 88 | 12,691 | | | | | 6,376 | 6,335 | 107 | 434 | | 15,638 | 15,820 | 818 | 57,497 | 4 |
| 30 | 13,145 | 88 | 14,980 | 10 | 1,000 | 5,654 | 2,320 | 400 | 2,934 | | 26,310 | 25,630 | 680 | 122,125 | 5 |
| 70 | 25,544 | 15 | 2,080 | 11 | 1,087 | 12,133 | 4,101 | 652 | 7,430 | | 99,050 | 96,240 | 2,810 | 218,355 | 6 |
| 317 | 121,601 | | | | | 10,962 | 1,754 | 203 | 4,000 | 5,000 | 226,353 | 225,665 | 688 | 415,886 | 7 |
| 82 | 81,300 | | | | | 4,103 | 2,661 | 465 | 977 | | 32,855 | 31,020 | 1,335 | 111,460 | 8 |
| 40 | 27,604 | 11 | 2,812 | | | 4,254 | 3,202 | 297 | 755 | | 24,476 | 23,643 | 833 | 74,680 | 9 |
| 72 | 29,700 | 685 | 120,900 | 44 | 5,798 | 11,575 | 7,280 | 782 | 3,563 | | 388,908 | 384,468 | 4,440 | 671,406 | 10 |
| 137 | 43,720 | 118 | 19,262 | 4 | 520 | 48,628 | 7,620 | 2,372 | 33,036 | | 258,923 | 248,300 | 5,623 | 450,932 | 11 |
| 652 | 206,053 | 650 | 142,604 | 465 | 68,589 | 150,150 | | 15,125 | 132,525 | 2,500 | 1,166,178 | 1,119,250 | 36,928 | 1,938,228 | 12 |
| 20 | 5,980 | 2 | 440 | | | 1,669 | 1,390 | 38 | 241 | | 2,663 | 2,317 | 346 | 17,400 | 13 |
| 48 | 21,040 | | | 1 | 150 | 5,467 | 3,320 | 190 | 1,407 | 550 | 51,284 | 53,894 | 390 | 108,210 | 14 |
| 145 | 33,721 | | | | | 37,831 | | 5,665 | 32,166 | | 243,080 | 237,095 | 5,985 | 368,300 | 15 |
| 595 | 284,492 | 1 | 300 | 6 | 1,040 | 65,227 | 4,430 | 7,842 | 49,755 | 3,700 | 443,949 | 430,830 | 13,000 | 1,028,736 | 16 |
| 5 | 8,216 | | | | | 381 | 252 | 14 | 116 | | 3,720 | 3,665 | 55 | 11,750 | 17 |
| 508 | 170,000 | | | 25 | 3,550 | 73,870 | 6,465 | 1,600 | 65,805 | | 277,200 | 275,450 | 1,750 | 703,500 | 18 |
| 32 | 14,946 | | | | | 13,903 | 1,160 | 1,319 | 11,424 | | 30,203 | 9,271 | 20,932 | 101,913 | 19 |
| 8 | 580 | 1 | 240 | | | 2,940 | 1,308 | 577 | 1,055 | | 2,184 | 1,827 | 357 | 9,880 | 20 |
| 12 | 2,050 | | | | | 277 | | 217 | 60 | | 7,670 | 7,670 | | 14,872 | 21 |
| 521 | 186,400 | | | | | 26,116 | 2,280 | 4,496 | 17,340 | 2,000 | 740,456 | 740,456 | | 1,137,431 | 22 |
| 6 | 1,260 | 47 | 18,423 | 9 | 700 | 4,210 | 2,775 | 550 | 885 | | 58,905 | 58,710 | 255 | 113,500 | 23 |
| 12 | 3,370 | 43 | 12,871 | 2 | 300 | 6,642 | 5,280 | 227 | 555 | | 59,748 | 59,713 | 35 | 104,608 | 24 |
| 73 | 31,728 | | | 1 | 100 | 8,866 | 2,402 | 121 | 6,343 | | 28,407 | 28,037 | 370 | 86,073 | 25 |
| 9 | 12,540 | | | | | 2,441 | 1,626 | 250 | 505 | | 41,136 | 40,695 | 441 | 105,100 | 26 |
| 19 | 8,704 | 1 | 600 | 3 | 540 | 1,496 | 1,146 | 190 | 160 | | 14,485 | 14,423 | 62 | 37,510 | 27 |
| 17 | 6,200 | | | | | 10,905 | 2,720 | 1,930 | 6,825 | | 112,474 | 111,522 | 952 | 182,279 | 28 |
| 66 | 20,996 | 60 | 11,030 | 2 | 300 | 4,163 | 2,430 | 448 | 485 | 800 | 39,292 | 39,250 | 12 | 68,085 | 29 |
| 2 | 600 | 5 | 1,264 | 2 | 808 | 204,408 | 3,060 | 13,062 | 248,236 | | 440,637 | 439,063 | 1,574 | 1,068,437 | 30 |
| 135 | 49,820 | | | | | 7,799 | 4,665 | 1,013 | 2,115 | | 92,856 | 92,499 | 357 | 201,986 | 32 |
| 280 | 125,164 | 107 | 22,716 | 22 | 2,682 | 26,613 | 10,049 | 2,164 | 11,245 | 3,155 | 143,149 | 138,475 | 4,674 | 405,964 | 33 |
| 145 | 120,703 | 13 | 4,122 | 2 | 161 | 141,818 | 4,735 | 4,318 | 99,005 | 33,710 | 146,994 | 139,865 | 7,129 | 636,730 | 34 |
| 22 | 10,678 | | | 1 | 100 | 5,922 | 4,456 | 615 | 851 | | 29,711 | 29,624 | 87 | 73,546 | 35 |
| 153 | 37,675 | | | 26 | 3,874 | 7,345 | 2,140 | 2,657 | 2,548 | | 397,718 | 396,412 | 1,306 | 504,360 | 36 |
| 32 | 12,876 | 4 | 890 | 2 | 240 | 6,762 | 1,891 | 214 | 5,157 | | 26,390 | 26,215 | 115 | 50,332 | 37 |
| 11 | 9,030 | 3 | 900 | | | 14,608 | 1,548 | 10 | 12,050 | 1,000 | 41,155 | 41,155 | | 84,200 | 38 |
| 4 | 2,200 | | | | | 8,031 | 2,118 | 29 | 404 | | 1,931 | 1,891 | 40 | 13,500 | 39 |
| 2,069 | 855,508 | 271 | 43,348 | 144 | 15,667 | 349,485 | 33,761 | 23,452 | 201,171 | 1,101 | 2,837,559 | 2,790,061 | 47,498 | 5,361,823 | 40 |

leather, tanned, curried, and finished, 1; liquors, distilled, 1; liquors, malt, 1; looking-glass and picture frames, 1; marble and stone work, 1; masonry, brick and stone, 2; mattresses and spring beds, 2; optical goods, 1; paper goods, not elsewhere specified, 1; paving and paving materials, 1; photolithography and photoengraving, 1; pickles, preserves, and sauces, 1; pottery, terra cotta, and fire-clay products, 2; roofing and roofing materials, 1; sewing machine repairing, 1; show cases, 1; soap and candles, 1; steam fittings and heating apparatus, 1; stereotyping and electrotyping, 2; sugar and molasses, refining, 2; trunks and valises, 2; typewriters and supplies, 1; woolen goods, 1.

TABLE 8.—MANUFACTURES IN CITIES

AUGUSTA.

| MANUFACTURING AND MECHANICAL INDUSTRIES. | Number of establishments. | CAPITAL. | | | | | Proprietors and firm members. | SALARIED OFFICIALS, CLERKS, ETC. | | AVERAGE NUMBER OF WAGE-EARNERS AND TOTAL WAGES. | |
|---|---------------------------|-------------|-----------|-------------|-----------------------------------|--------------------|-------------------------------|----------------------------------|-----------|---|-------------|
| | | Total. | Land. | Buildings. | Machinery, tools, and implements. | Cash and sundries. | | Number. | Salaries. | Total. | |
| | | | | | | | | | | Average number. | Wages. |
| 1 All industries ----- | 388 | \$9,016,619 | \$911,724 | \$1,904,696 | \$3,304,309 | \$2,895,890 | 380 | 264 | \$278,036 | 7,138 | \$1,815,879 |
| 2 Bicycle and tricycle repairing ----- | 9 | 12,160 | 400 | 150 | 2,500 | 9,110 | 8 | 3 | 1,000 | 15 | 6,150 |
| 3 Blacksmithing and wheelwrighting ----- | 25 | 12,865 | 5,850 | 2,850 | 2,330 | 1,835 | 25 | 1 | 750 | 42 | 13,748 |
| 4 Boots and shoes, custom work and repairing ----- | 16 | 1,925 | | | 675 | 1,250 | 17 | | | 11 | 8,100 |
| 5 Bread and other bakery products ----- | 7 | 83,175 | 10,200 | 23,600 | 2,150 | 2,225 | 7 | 1 | 600 | 30 | 9,350 |
| 6 Carpentering ----- | 86 | 85,280 | 7,500 | 14,300 | 5,340 | 8,140 | 86 | 3 | 3,100 | 262 | 105,561 |
| 7 Carriages and wagons ----- | 5 | 77,150 | 6,000 | 10,000 | 7,475 | 53,675 | 7 | | | 48 | 17,024 |
| 8 Clothing, men's, custom work and repairing ----- | 18 | 69,160 | 10,000 | 20,000 | 3,325 | 29,835 | 21 | 9 | 11,500 | 88 | 38,016 |
| 9 Clothing, women's, dressmaking ----- | 67 | 33,500 | 9,150 | 17,950 | 4,615 | 1,785 | 67 | | | 105 | 19,929 |
| 10 Confectionery ----- | 7 | 40,890 | 13,400 | 17,500 | 3,425 | 6,565 | 8 | 3 | 1,150 | 29 | 6,511 |
| 11 Cotton, compressing ----- | 3 | 5,500 | | | 5,300 | 200 | | 17 | 13,252 | 225 | 32,878 |
| 12 Cotton goods ----- | 8 | 5,133,374 | 498,619 | 1,177,000 | 2,281,604 | 1,176,151 | | 42 | 67,137 | 3,459 | 680,877 |
| 13 Dyeing and cleaning ----- | 5 | 6,300 | 2,000 | 3,000 | 875 | 425 | 5 | | | 10 | 2,925 |
| 14 Flouring and grist mill products ----- | 6 | 147,377 | 35,500 | 28,000 | 15,715 | 68,162 | 7 | 15 | 10,410 | 48 | 11,625 |
| 15 Furniture, cabinetmaking, repairing, and upholstering ----- | 7 | 4,215 | | | 670 | 3,545 | 6 | | | 13 | 3,920 |
| 16 Ice, artificial ----- | 3 | 181,000 | 9,000 | 22,000 | 96,000 | 4,000 | | 8 | 8,340 | 37 | 6,900 |
| 17 Lock and gun smithing ----- | 3 | 1,800 | | | 900 | 900 | 4 | | | 4 | 600 |
| 18 Looking-glass and picture frames ----- | 3 | 2,375 | | | 225 | 2,150 | 3 | | | 3 | 960 |
| 19 Lumber and timber products ----- | 5 | 25,630 | 8,285 | 120 | 13,500 | 3,725 | 6 | 2 | 480 | 46 | 9,225 |
| 20 Lumber, planing mill products, including sash, doors, and blinds ----- | 4 | 279,950 | 37,000 | 37,000 | 81,200 | 124,650 | 3 | 34 | 33,400 | 255 | 92,000 |
| 21 Masonry, brick and stone ----- | 17 | 52,525 | 7,350 | 12,550 | 4,650 | 27,975 | 18 | 2 | 2,000 | 286 | 108,610 |
| 22 Mattresses and spring beds ----- | 4 | 1,300 | 200 | 300 | 280 | 580 | 4 | | | 7 | 1,738 |
| 23 Millinery, custom work ----- | 13 | 17,750 | 1,000 | 3,000 | 700 | 13,050 | 13 | 2 | 600 | 42 | 10,655 |
| 24 Monuments and tombstones ----- | 3 | 8,800 | 50 | 250 | 2,500 | 6,000 | 4 | 2 | 1,200 | 46 | 13,700 |
| 25 Painting, house, sign, etc ----- | 24 | 10,405 | 2,500 | 3,900 | 2,045 | 1,960 | 25 | | | 78 | 24,465 |
| 26 Photography ----- | 5 | 4,600 | | | 3,000 | 1,600 | 7 | | | 7 | 2,700 |
| 27 Plumbing, and gas and steam fitting ----- | 8 | 78,300 | 6,000 | 10,000 | 3,850 | 58,450 | 10 | 10 | 6,598 | 93 | 36,752 |
| 28 Printing and publishing, book and job ----- | 6 | 82,500 | | | 87,500 | 15,000 | 8 | 2 | 2,580 | 212 | 25,427 |
| 29 Printing and publishing, newspapers and periodicals ----- | 5 | 152,450 | 20,500 | 35,500 | 85,950 | 30,500 | 4 | 10 | 11,064 | 108 | 58,532 |
| 30 Roofing and roofing materials ----- | 5 | 42,860 | 10,000 | 18,000 | 5,425 | 9,435 | 5 | | | 35 | 16,600 |
| 31 Saddlery and harness ----- | 3 | 1,470 | | | 115 | 1,355 | 3 | | | 8 | 1,096 |
| 32 Tinsmithing, coppersmithing, and sheet-iron working ----- | 5 | 6,485 | | | 1,375 | 5,110 | 5 | | | 12 | 4,080 |
| 33 Tobacco, cigars and cigarettes ----- | 5 | 5,430 | 2,750 | 200 | 375 | 2,105 | 5 | 1 | 600 | 9 | 2,178 |
| 34 Watch, clock, and jewelry repairing ----- | 14 | 18,720 | 3,000 | 7,000 | 2,910 | 5,810 | 15 | | | 11 | 6,650 |
| 35 All other industries ¹ ----- | 34 | 2,480,538 | 205,470 | 440,526 | 615,810 | 1,218,732 | 24 | 97 | 102,295 | 1,454 | 426,402 |

¹ Embraces awnings, tents, and sails, 2; boots and shoes, factory product, 1; bottling, 1; brick and tile, 2; brooms and brushes, 1; cars and general shop construction and repairs by steam railroad companies, 2; clothing, men's, factory product, 1; cotton, ginning, 1; cotton waste, 1; druggists' preparations, not including prescriptions, 1; electrical apparatus and supplies, 1; fancy articles, not elsewhere specified, 1; fertilizers, 2; foundry and machine shop products, 2; gas, illuminating, 1.

MACON.

| | | | | | | | | | | | |
|--|-----|-------------|-----------|-----------|-------------|-------------|-----|-----|-----------|-------|-------------|
| 1 All industries ----- | 182 | \$5,076,005 | \$307,716 | \$323,563 | \$1,605,206 | \$2,339,520 | 173 | 263 | \$272,138 | 3,700 | \$1,047,437 |
| 2 Bicycle and tricycle repairing ----- | 5 | 4,152 | | | 2,302 | 1,850 | 6 | | | 7 | 1,900 |
| 3 Blacksmithing and wheelwrighting ----- | 12 | 9,511 | 1,600 | 3,529 | 1,335 | 3,047 | 13 | | | 17 | 5,456 |
| 4 Boots and shoes, custom work and repairing ----- | 13 | 1,744 | | | 1,131 | 613 | 12 | | | 16 | 5,153 |
| 5 Bread and other bakery products ----- | 5 | 47,550 | 15,000 | 23,500 | 1,425 | 7,625 | 7 | 5 | 1,758 | 12 | 5,056 |
| 6 Carpentering ----- | 3 | 4,650 | | | 1,150 | 3,500 | 3 | | | 54 | 9,500 |
| 7 Carriages and wagons ----- | 7 | 29,600 | 6,000 | 2,000 | 4,250 | 17,350 | 9 | 8 | 1,840 | 62 | 17,106 |
| 8 Cars and general shop construction and repairs by steam railroad companies ----- | 4 | 189,681 | 23,100 | 83,100 | 55,600 | 27,881 | | 17 | 13,540 | 572 | 265,164 |
| 9 Clothing, men's, custom work and repairing ----- | 11 | 31,577 | | | 1,432 | 30,145 | 13 | 7 | 3,450 | 30 | 14,466 |
| 10 Clothing, women's, dressmaking ----- | 7 | 2,175 | | | 925 | 1,250 | 5 | 2 | 710 | 66 | 10,192 |
| 11 Confectionery ----- | 4 | 58,400 | | | 4,000 | 54,400 | 2 | 19 | 20,150 | 63 | 17,320 |
| 12 Cotton goods ----- | 3 | 1,270,213 | 55,500 | 207,178 | 527,121 | 480,414 | | 26 | 47,816 | 920 | 190,413 |
| 13 Dyeing and cleaning ----- | 3 | 1,464 | 500 | 200 | 885 | 379 | 4 | | | 15 | 2,422 |
| 14 Foundry and machine shop products ----- | 3 | 257,735 | 30,000 | 35,000 | 23,000 | 169,735 | | 13 | 13,420 | 167 | 65,000 |
| 15 Furniture, cabinetmaking, repairing, and upholstering ----- | 3 | 2,225 | | 125 | 1,190 | 910 | 8 | | | 8 | 3,240 |
| 16 Lumber, planing mill products, including sash, doors, and blinds ----- | 5 | 262,413 | 26,500 | 31,000 | 58,786 | 146,127 | 5 | 17 | 13,270 | 202 | 49,847 |
| 17 Millinery, custom work ----- | 8 | 17,240 | | | 840 | 16,400 | 9 | 7 | 4,280 | 29 | 8,605 |
| 18 Painting, house, sign, etc ----- | 3 | 2,450 | | | 400 | 2,050 | 3 | | | 12 | 5,270 |
| 19 Photography ----- | 4 | 7,500 | 1,200 | 600 | 4,400 | 1,300 | 5 | | | | |
| 20 Plumbing, and gas and steam fitting ----- | 6 | 30,142 | | | 3,400 | 26,742 | 6 | 4 | 2,400 | 74 | 22,100 |
| 21 Printing and publishing, book and job ----- | 6 | 32,225 | | | 18,700 | 15,525 | 6 | 4 | 2,400 | 35 | 11,523 |

BY SPECIFIED INDUSTRIES: 1900—Continued.

AUGUSTA.

| AVERAGE NUMBER OF WAGE-EARNERS AND TOTAL WAGES—continued. | | | | | | MISCELLANEOUS EXPENSES. | | | | | COST OF MATERIALS USED. | | | Value of products, including custom work and repairing. | |
|---|-------------|---------------------------|-----------|---------------------------|----------|-------------------------|----------------|--|---------------------------------|----------------|-------------------------|---|----------------------------------|---|----|
| Men, 16 years and over. | | Women, 16 years and over. | | Children, under 16 years. | | Total. | Rent of works. | Taxes, not including internal revenue. | Rent of offices, interest, etc. | Contract work. | Total. | Principal materials, including mill supplies and freight. | Fuel and rent of power and heat. | | |
| Average number. | Wages. | Average number. | Wages. | Average number. | Wages. | | | | | | | | | | |
| 4,887 | \$1,363,110 | 2,081 | \$382,634 | 670 | \$70,135 | \$618,938 | \$61,202 | \$117,348 | \$435,288 | \$5,100 | \$6,244,286 | \$6,108,944 | \$135,042 | \$10,069,750 | 1 |
| 15 | 6,160 | | | | | 1,664 | 1,172 | 186 | 300 | | 12,173 | 11,969 | 204 | 26,475 | 2 |
| 41 | 13,676 | | | 1 | 72 | 2,490 | 1,741 | 239 | 510 | | 12,492 | 11,738 | 754 | 46,800 | 3 |
| 11 | 3,100 | | | | | 1,679 | 1,317 | 66 | 206 | | 4,650 | 4,650 | | 14,681 | 4 |
| 30 | 9,850 | | | | | 2,045 | 1,030 | 375 | 640 | | 81,377 | 30,465 | 912 | 61,585 | 5 |
| 262 | 105,561 | | | | | 4,233 | 2,282 | 735 | 1,116 | 100 | 183,561 | 183,551 | 10 | 860,825 | 6 |
| 47 | 16,880 | | | 1 | 144 | 3,197 | 782 | 1,250 | 1,185 | | 20,677 | 19,895 | 782 | 50,505 | 7 |
| 68 | 32,440 | 18 | 5,360 | 2 | 216 | 9,952 | 3,543 | 707 | 5,702 | | 53,373 | 53,303 | 75 | 135,825 | 8 |
| | | 101 | 19,644 | 4 | 285 | 5,212 | 4,437 | 401 | 374 | | 87,525 | 87,475 | 50 | 150,010 | 9 |
| 27 | 8,094 | 2 | 417 | | | 1,760 | 1,060 | 448 | 242 | | 24,663 | 24,261 | 399 | 46,250 | 10 |
| 225 | 32,873 | | | | | 21,170 | 15,000 | 1,219 | 4,951 | | 9,045 | 4,480 | 4,565 | 86,548 | 11 |
| 1,344 | 327,919 | 1,514 | 301,337 | 601 | 61,621 | 220,902 | | 71,988 | 143,914 | 5,000 | 2,089,563 | 2,027,226 | 62,337 | 3,429,348 | 12 |
| 7 | 2,200 | 3 | 725 | | | 1,555 | 750 | 155 | 650 | | 1,405 | 1,375 | 30 | 7,350 | 13 |
| 47 | 11,500 | | | 1 | 65 | 10,426 | 450 | 2,244 | 7,732 | | 671,485 | 670,295 | 1,190 | 739,781 | 14 |
| 10 | 3,520 | | | 3 | 400 | 766 | 696 | 60 | 60 | | 2,632 | | | 11,200 | 15 |
| 37 | 6,900 | | | | | 9,000 | | 2,400 | 6,600 | | 17,800 | 5,300 | 12,500 | 58,000 | 16 |
| 2 | 400 | | | 2 | 200 | 585 | 470 | 40 | 55 | | 1,345 | 1,320 | 25 | 3,250 | 17 |
| 3 | 860 | | | | | 822 | 780 | 30 | 12 | | 3,000 | 3,000 | | 6,925 | 18 |
| 46 | 9,225 | | | | | 1,760 | 50 | 135 | 1,575 | | 10,110 | 10,110 | | 27,850 | 19 |
| 240 | 89,500 | | | 15 | 2,500 | 13,697 | 450 | 2,822 | 10,425 | | 193,340 | 196,990 | 1,350 | 373,120 | 20 |
| 286 | 108,610 | | | | | 1,828 | 538 | 729 | 561 | | 161,826 | 161,826 | | 300,573 | 21 |
| 4 | 1,850 | 3 | 388 | | | 440 | 360 | 25 | 55 | | 5,185 | 5,185 | | 12,300 | 22 |
| | | 39 | 10,315 | 3 | 340 | 6,438 | 5,620 | 306 | 512 | | 57,150 | 57,150 | | 94,550 | 23 |
| 46 | 18,700 | | | | | 1,500 | 840 | 425 | 325 | | 18,130 | 17,960 | 170 | 48,300 | 24 |
| 77 | 24,890 | | | 1 | 75 | 1,907 | 1,437 | 296 | 174 | | 17,375 | 17,375 | | 69,950 | 25 |
| 3 | 1,400 | 4 | 1,300 | | | 1,407 | 1,370 | 110 | 17 | | 2,990 | | | 12,216 | 26 |
| 91 | 36,540 | | | 2 | 212 | 3,031 | 1,345 | 898 | 783 | | 148,915 | 148,765 | 150 | 236,952 | 27 |
| 151 | 23,407 | 61 | 2,020 | | | 3,595 | 1,960 | 1,035 | 600 | | 19,186 | 18,345 | 841 | 70,132 | 28 |
| 81 | 51,970 | 21 | 5,800 | 6 | 762 | 19,611 | 960 | 1,820 | 16,331 | | 34,875 | 31,730 | 3,095 | 140,300 | 29 |
| 35 | 16,600 | | | | | 1,929 | 684 | 335 | 910 | | 39,582 | 39,362 | 220 | 69,166 | 30 |
| 4 | 850 | | | 4 | 246 | 506 | 486 | 20 | | | 1,695 | 1,695 | | 4,975 | 31 |
| 12 | 4,080 | | | | | 985 | 690 | 55 | 240 | | 5,780 | 5,771 | 9 | 14,325 | 32 |
| 7 | 2,066 | | | 2 | 112 | 1,627 | 166 | 58 | 1,413 | | 4,049 | 4,049 | | 11,610 | 33 |
| 7 | 6,000 | | | 4 | 650 | 2,904 | 2,379 | 165 | 360 | | 5,273 | | | 28,400 | 34 |
| 1,121 | 388,839 | 315 | 35,328 | 18 | 2,235 | 253,175 | 6,367 | 25,641 | 226,267 | | 2,236,104 | 2,249,780 | 46,324 | 3,331,473 | 35 |

rating and heating, 1; liquors, distilled, 1; liquors, malt, 1; marble and stone work, 1; mineral and soda waters, 1; oil, cottonseed and cake, 2; optical goods, 2; patent medicines and compounds, 1; sewing machine repairing, 1; shirts, 1; stencils and brands, 1; trunks and valises, 1; vinegar and cider, 1.

MACON.

| | | | | | | | | | | | | | | | |
|-------|-----------|-----|-----------|-----|----------|-----------|----------|----------|-----------|----------|-------------|-------------|----------|-------------|----|
| 2,762 | \$893,430 | 669 | \$114,249 | 269 | \$39,758 | \$445,078 | \$37,433 | \$39,092 | \$341,733 | \$26,815 | \$3,741,167 | \$3,652,863 | \$88,301 | \$6,495,767 | 1 |
| 5 | 1,750 | | | 2 | 150 | 1,221 | 902 | 117 | 202 | | 725 | 558 | 167 | 6,500 | 2 |
| 17 | 5,456 | | | | | 1,555 | 1,353 | 72 | 130 | | 4,460 | 4,397 | 263 | 20,311 | 3 |
| 15 | 5,099 | | | 1 | 54 | 979 | 878 | 19 | 82 | | 4,409 | 4,388 | 21 | 15,373 | 4 |
| 12 | 5,056 | | | | | 2,455 | 660 | 835 | 960 | | 18,130 | 17,545 | 585 | 35,872 | 5 |
| 54 | 9,500 | | | | | 704 | 384 | | 320 | | 31,450 | 31,450 | | 52,322 | 6 |
| 52 | 17,106 | | | | | 2,314 | 1,092 | 352 | 870 | | 35,918 | 35,087 | 831 | 81,558 | 7 |
| 572 | 205,161 | | | | | 9,155 | | 3,012 | 4,999 | 1,171 | 202,475 | 198,316 | 3,659 | 495,364 | 8 |
| 29 | 13,906 | 1 | 560 | | | 4,065 | 2,080 | 125 | 1,800 | | 17,780 | 17,487 | 293 | 48,770 | 9 |
| | | 66 | 10,192 | | | 533 | 422 | 30 | 81 | | 3,492 | 3,432 | 60 | 16,734 | 10 |
| 31 | 12,770 | 24 | 3,468 | 8 | 1,092 | 10,059 | 3,100 | 1,173 | 5,786 | | 131,425 | 129,235 | 2,190 | 179,500 | 11 |
| 443 | 104,627 | 307 | 57,629 | 170 | 28,157 | 65,831 | | 10,220 | 38,918 | 16,693 | 819,829 | 803,130 | 16,699 | 1,237,125 | 12 |
| 15 | 2,422 | | | | | 443 | 390 | 13 | 45 | | 3,456 | | 179 | 5,550 | 13 |
| 167 | 65,000 | | | | | 7,633 | 600 | 1,723 | 5,365 | | 183,353 | 178,203 | 5,150 | 239,173 | 14 |
| 8 | 3,240 | | | | | 805 | 647 | 31 | 127 | | 2,260 | | | 9,900 | 15 |
| 198 | 49,247 | | | 4 | 600 | 11,595 | 1,760 | 2,743 | 6,092 | 1,060 | 165,827 | 165,427 | 400 | 302,703 | 16 |
| 1 | 325 | 27 | 8,020 | 1 | 260 | 6,721 | 4,122 | 337 | 2,262 | | 42,735 | 42,735 | | 76,300 | 17 |
| 12 | 5,270 | | | | | 219 | 224 | | 25 | | 3,006 | 3,005 | 1 | 15,103 | 18 |
| | | | | | | 1,231 | 960 | 108 | 163 | | 3,638 | 3,638 | | 9,700 | 19 |
| 73 | 22,000 | | | 1 | 100 | 2,540 | 1,837 | 193 | 510 | | 51,924 | 51,449 | 475 | 95,490 | 20 |
| 31 | 10,855 | 4 | 668 | | | 3,967 | 2,220 | 643 | 1,104 | | 14,535 | 13,501 | 1,031 | 43,350 | 21 |

TABLE 8.—MANUFACTURES IN CITIES

MACON—Continued.

| MANUFACTURING AND MECHANICAL INDUSTRIES AND CITIES AND TOWNS. | Number of establishments. | CAPITAL. | | | | | Proprietors and firm members. | SALARIED OFFICIALS, CLERKS, ETC. | | AVERAGE NUMBER OF WAGE-EARNERS AND TOTAL WAGES. | |
|---|---------------------------|-----------|---------|------------|-----------------------------------|--------------------|-------------------------------|----------------------------------|-----------|---|----------|
| | | Total. | Land. | Buildings. | Machinery, tools, and implements. | Cash and sundries. | | Number. | Salaries. | Total. | |
| | | | | | | | | | | Average number. | Wages. |
| 22 Printing and publishing, newspapers and periodicals. | 4 | \$44,100 | | | \$28,500 | \$15,600 | 1 | 26 | \$19,376 | 60 | \$28,584 |
| 23 Saddlery and harness. | 6 | 93,159 | \$1,500 | \$2,000 | 7,459 | 82,200 | 9 | 11 | 6,280 | 70 | 21,139 |
| 24 Tinsmithing, coppersmithing, and sheet-iron working. | 8 | 3,450 | | | 1,100 | 2,350 | 3 | | | 7 | 3,037 |
| 25 Watch, clock, and jewelry repairing. | 8 | 4,080 | | | 1,625 | 2,455 | 8 | | | 15 | 7,230 |
| 26 All other industries ¹ . | 41 | 2,668,609 | 146,816 | 435,331 | 856,750 | 1,229,612 | 36 | 102 | 111,948 | 1,197 | 277,764 |

¹ Embraces agricultural implements, 1; brick and tile, 2; brooms and brushes, 2; cars and general shop construction and repairs by street railroad companies, 1; clothing, men's, factory product, 1; cooperage, 2; cotton, compressing, 1; druggists' preparations, not including prescriptions, 1; fertilizers, 1; flouring and grist mill products, 1; furniture, factory product, 2; gas, illuminating and heating, 1; hosiery and knit goods, 1; ice, artificial, 1; liquors, malt, 1; looking-glass and picture

SAVANNAH.

| | | | | | | | | | | | |
|---|-----|-------------|-----------|-----------|-------------|-------------|-----|-----|-----------|-------|-------------|
| 1 All industries | 155 | \$5,716,491 | \$566,850 | \$928,194 | \$1,868,399 | \$2,853,048 | 157 | 220 | \$231,377 | 2,870 | \$1,176,150 |
| 2 Bicycle and tricycle repairing | 4 | 5,700 | | | 3,100 | 2,600 | 4 | | | 17 | 5,110 |
| 3 Blacksmithing and wheelwrighting | 18 | 35,090 | 8,500 | 4,850 | 7,390 | 14,550 | 19 | | | 64 | 26,115 |
| 4 Boots and shoes, custom work and repairing. | 3 | 2,885 | | | 2,025 | 860 | 3 | 1 | 600 | 17 | 6,250 |
| 5 Bread and other bakery products. | 16 | 38,525 | 8,000 | 6,500 | 10,925 | 13,100 | 16 | 2 | 720 | 49 | 27,154 |
| 6 Carriages and wagons. | 3 | 37,600 | 14,500 | 8,000 | 5,900 | 9,800 | 3 | 1 | 1,500 | 32 | 15,276 |
| 7 Cars and general shop construction and repairs by steam railroad companies. | 3 | 326,489 | 30,050 | 99,000 | 81,200 | 116,239 | | 19 | 21,858 | 721 | 395,450 |
| 8 Clothing, men's, custom work and repairing. | 3 | 9,400 | | | 400 | 9,000 | 3 | | | 26 | 17,300 |
| 9 Confectionery | 4 | 23,695 | | | 5,057 | 18,638 | 3 | 10 | 5,540 | 43 | 17,053 |
| 10 Fertilizers | 3 | 1,392,954 | 9,500 | 171,000 | 54,000 | 1,158,454 | 3 | 9 | 26,023 | 235 | 67,332 |
| 11 Foundry and machine shop products. | 6 | 276,282 | 50,000 | 88,400 | 60,250 | 77,632 | 11 | 8 | 11,050 | 230 | 98,385 |
| 12 Furniture, cabinetmaking, repairing, and upholstering. | 4 | 8,900 | 2,400 | 4,600 | 500 | 1,400 | 4 | | | 5 | 2,130 |
| 13 Lumber, planing mill products, including sash, doors, and blinds. | 4 | 204,341 | | 27,225 | 71,500 | 105,616 | 6 | 10 | 7,900 | 123 | 43,560 |
| 14 Mineral and soda waters | 3 | 14,200 | | | 9,800 | 4,400 | 1 | 6 | 6,020 | 26 | 7,725 |
| 15 Patent medicines and compounds | 3 | 31,000 | 2,000 | 4,000 | 1,000 | 24,000 | 1 | 2 | 1,700 | 21 | 5,016 |
| 16 Photography | 4 | 8,050 | | | 4,100 | 3,950 | 5 | | | 12 | 4,909 |
| 17 Plumbing, and gas and steam fitting. | 10 | 58,600 | 7,000 | 3,500 | 2,900 | 40,200 | 12 | 3 | 2,240 | 57 | 29,618 |
| 18 Printing and publishing, book and job. | 5 | 72,320 | | | 38,943 | 33,377 | 7 | 3 | 3,696 | 75 | 32,661 |
| 19 Printing and publishing, newspapers and periodicals. | 4 | 175,800 | 20,000 | 30,000 | 92,500 | 33,300 | 1 | 47 | 33,420 | 157 | 82,672 |
| 20 Saddlery and harness | 3 | 9,137 | | | 2,575 | 6,562 | 3 | 1 | 1,000 | 13 | 4,809 |
| 21 Tinsmithing, coppersmithing, and sheet-iron working. | 5 | 107,600 | 27,600 | 6,000 | 3,900 | 70,100 | 7 | | | 49 | 30,357 |
| 22 Tobacco, cigars and cigarettes | 7 | 7,505 | | | 700 | 6,805 | 7 | | | 14 | 5,317 |
| 23 Trunks and valises | 3 | 4,950 | | | 250 | 4,700 | 3 | | | 11 | 4,100 |
| 24 Watch, clock, and jewelry repairing | 11 | 7,700 | | | 3,950 | 3,750 | 14 | | | 7 | 6,540 |
| 25 All other industries ¹ | 26 | 2,857,768 | 387,300 | 470,119 | 906,134 | 1,094,215 | 21 | 98 | 108,110 | 866 | 241,871 |

¹ Embraces baking and yeast powders, 2; brass castings and brass finishing, 1; brooms and brushes, 1; carpentering, 1; cooperage, 1; cotton, compressing, 1; dyeing and cleaning, 1; electrical construction and repairs, 1; gas, illuminating and heating, 1; ice, artificial, 2; liquors, malt, 2; lock and gun smithing, 1; looking-glass and picture frames, 1; lumber and timber products, 1; monuments and tombstones, 2; oil, cottonseed and cake, 1; oil, not elsewhere specified, 1; painting, house, sign, etc., 1; printing materials, 1; rice, cleaning and polishing, 1; stencils and brands, 1; turpentine and rosin, 1.

TABLE 9.—MANUFACTURES IN CITIES AND

| | | | | | | | | | | | |
|------------------------------|-----|--------------|-----------|-------------|-------------|-------------|-----|-----|-----------|--------|-------------|
| 1 Total for cities and towns | 668 | \$14,369,349 | \$916,701 | \$2,100,408 | \$4,942,167 | \$6,410,073 | 731 | 525 | \$172,928 | 12,704 | \$3,150,477 |
| 2 Americus | 57 | 455,056 | 57,750 | 54,450 | 216,330 | 126,526 | 61 | 31 | 25,320 | 595 | 210,047 |
| 3 Athens | 71 | 801,199 | 43,725 | 86,836 | 233,977 | 389,661 | 73 | 37 | 21,631 | 851 | 176,758 |
| 4 Barnesville | 18 | 531,633 | 19,400 | 67,050 | 173,515 | 271,718 | 17 | 23 | 21,570 | 578 | 119,623 |
| 5 Brunswick | 78 | 423,826 | 49,400 | 70,002 | 155,440 | 148,384 | 76 | 18 | 16,540 | 550 | 247,516 |
| 6 Cartersville | 40 | 182,523 | 26,770 | 14,540 | 58,595 | 32,618 | 49 | 9 | 3,475 | 124 | 28,390 |
| 7 Columbus | 135 | 5,690,882 | 333,098 | 335,443 | 1,763,107 | 2,759,284 | 152 | 196 | 192,656 | 4,814 | 1,201,320 |
| 8 Dalton | 40 | 776,504 | 20,310 | 112,990 | 354,757 | 287,947 | 62 | 27 | 18,405 | 338 | 144,745 |
| 9 Gainesville | 50 | 317,775 | 45,345 | 37,945 | 114,135 | 120,350 | 65 | 20 | 14,566 | 544 | 132,657 |
| 10 Griffin | 29 | 1,407,562 | 20,775 | 243,625 | 632,853 | 510,309 | 28 | 23 | 27,969 | 1,021 | 229,790 |
| 11 La Grange | 30 | 978,366 | 36,635 | 132,094 | 470,297 | 339,340 | 28 | 12 | 11,228 | 716 | 133,158 |
| 12 Marietta | 34 | 698,134 | 56,790 | 99,392 | 184,542 | 358,410 | 35 | 40 | 34,719 | 633 | 180,157 |
| 13 Newnan | 27 | 824,721 | 33,557 | 114,800 | 178,054 | 497,710 | 27 | 29 | 25,056 | 466 | 102,567 |
| 14 Rome | 64 | 1,328,118 | 173,646 | 230,641 | 355,965 | 567,866 | 53 | 55 | 59,854 | 944 | 248,249 |

BY SPECIFIED INDUSTRIES: 1900—Continued.

MACON—Continued.

| AVERAGE NUMBER OF WAGE-EARNERS AND TOTAL WAGES—continued. | | | | | | MISCELLANEOUS EXPENSES. | | | | | COST OF MATERIALS USED. | | | Value of products, including custom work and repairing. | |
|---|----------|---------------------------|--------|---------------------------|--------|-------------------------|----------------|--|---------------------------------|----------------|-------------------------|---|----------------------------------|---|----|
| Men, 16 years and over. | | Women, 16 years and over. | | Children, under 16 years. | | Total. | Rent of works. | Taxes, not including internal revenue. | Rent of offices, interest, etc. | Contract work. | Total. | Principal materials, including mill supplies and freight. | Fuel and rent of power and heat. | | |
| Average number. | Wages. | Average number. | Wages. | Average number. | Wages. | | | | | | | | | | |
| 58 | \$28,144 | 1 | \$260 | 1 | \$130 | \$6,772 | \$1,480 | \$940 | \$3,952 | \$100 | \$14,765 | \$12,661 | \$2,104 | \$80,170 | 22 |
| 58 | 19,845 | 2 | 254 | 10 | 1,040 | 6,516 | 2,400 | 550 | 3,566 | ----- | 117,708 | 117,698 | 15 | 160,150 | 23 |
| 7 | 3,037 | ----- | ----- | ----- | ----- | 522 | 432 | 25 | 65 | ----- | 5,213 | 5,174 | 89 | 11,659 | 24 |
| 15 | 7,230 | ----- | ----- | ----- | ----- | 952 | 856 | 41 | 55 | ----- | 8,796 | 8,755 | 41 | 17,450 | 25 |
| 889 | 236,381 | 237 | 33,208 | 71 | 8,175 | 296,226 | 8,634 | 15,785 | 264,259 | 7,548 | 1,858,598 | 1,804,498 | 54,098 | 8,189,238 | 26 |

frames, 2; lumber and timber products, 1; masonry, brick and stone, 1; mineral and soda waters, 2; monuments and tombstones, 2; oil, cottonseed and cake, 2; paper hanging, 1; patent medicines and compounds, 1; paving and paving materials, 1; refrigerators, 1; roofing and roofing materials, 1; sewing machine repairing, 1; shirts, 1; slaughtering and meat packing, wholesale, 1; tobacco, cigars and cigarettes, 2; umbrellas and canes, 1; vinegar and cider, 1.

SAVANNAH.

| | | | | | | | | | | | | | | | |
|-------|-------------|-------|----------|-------|-------|-----------|----------|----------|-----------|---------|-------------|-------------|----------|-------------|----|
| 2,782 | \$1,157,417 | 85 | \$18,267 | 3 | \$466 | \$409,918 | \$65,208 | \$50,681 | \$352,229 | \$1,800 | \$3,916,884 | \$3,822,410 | \$98,474 | \$5,461,816 | 1 |
| 17 | 5,110 | ----- | ----- | ----- | ----- | 1,831 | 1,436 | 177 | 218 | ----- | 1,784 | 1,600 | 184 | 11,400 | 2 |
| 64 | 25,115 | ----- | ----- | ----- | ----- | 4,520 | 3,242 | 632 | 646 | ----- | 22,392 | 21,423 | 969 | 78,720 | 3 |
| 16 | 6,010 | 1 | 250 | ----- | ----- | 896 | 759 | 72 | 65 | ----- | 7,027 | 6,895 | 132 | 16,600 | 4 |
| 47 | 26,674 | 2 | 480 | ----- | ----- | 4,734 | 2,820 | 926 | 988 | ----- | 90,461 | 88,989 | 1,472 | 156,065 | 5 |
| 32 | 15,276 | ----- | ----- | ----- | ----- | 1,266 | 396 | 420 | 390 | ----- | 14,762 | 14,475 | 287 | 45,480 | 6 |
| 721 | 395,450 | ----- | ----- | ----- | ----- | 9,499 | ----- | 7,157 | 2,342 | ----- | 300,718 | 299,596 | 1,117 | 727,520 | 7 |
| 24 | 16,800 | 2 | 500 | ----- | ----- | 3,258 | 2,880 | 235 | 143 | ----- | 22,935 | 22,900 | 35 | 53,080 | 8 |
| 235 | 14,635 | 16 | 2,418 | ----- | ----- | 3,837 | 2,508 | 254 | 1,075 | ----- | 87,111 | 86,386 | 725 | 135,756 | 9 |
| 230 | 67,332 | ----- | ----- | ----- | ----- | 83,426 | 1,185 | 6,690 | 80,551 | ----- | 418,111 | 399,129 | 13,982 | 615,539 | 10 |
| 5 | 2,130 | ----- | ----- | ----- | ----- | 1,053 | 1,050 | 5,173 | 6,300 | ----- | 89,786 | 88,861 | 6,425 | 275,733 | 11 |
| 122 | 43,060 | 1 | 500 | ----- | ----- | 638 | 300 | 201 | 137 | ----- | 3,024 | 3,024 | ----- | 9,854 | 12 |
| 26 | 7,725 | ----- | ----- | ----- | ----- | 10,398 | 2,020 | 1,856 | 7,022 | ----- | 145,057 | 144,707 | 350 | 227,372 | 13 |
| 6 | 1,776 | 15 | 3,240 | ----- | ----- | 2,158 | 748 | 233 | 1,122 | ----- | 7,858 | 7,808 | 50 | 31,700 | 14 |
| 8 | 4,125 | 3 | 700 | 1 | 84 | 9,050 | 990 | 210 | 7,850 | ----- | 25,926 | 25,926 | ----- | 74,500 | 15 |
| 57 | 29,618 | ----- | ----- | ----- | ----- | 2,812 | 2,170 | 227 | 415 | ----- | 6,185 | 6,185 | ----- | 20,425 | 16 |
| 59 | 29,234 | 16 | 3,727 | ----- | ----- | 2,723 | 1,740 | 537 | 446 | ----- | 70,086 | 69,511 | 575 | 133,614 | 17 |
| 143 | 78,380 | 13 | 4,160 | 1 | 132 | 6,896 | 2,690 | 622 | 3,581 | ----- | 34,800 | 33,740 | 1,060 | 91,430 | 18 |
| 13 | 4,909 | ----- | ----- | ----- | ----- | 26,349 | 840 | 1,627 | 22,082 | 1,800 | 61,137 | 57,715 | 3,422 | 237,600 | 19 |
| 49 | 30,387 | ----- | ----- | ----- | ----- | 1,797 | 1,560 | 147 | 90 | ----- | 19,982 | 19,970 | 12 | 36,194 | 20 |
| 14 | 5,317 | ----- | ----- | ----- | ----- | 2,227 | 1,080 | 652 | 495 | ----- | 104,025 | 103,170 | 855 | 155,335 | 21 |
| 11 | 4,100 | ----- | ----- | ----- | ----- | 3,838 | 1,428 | 130 | 2,230 | ----- | 5,782 | 5,782 | ----- | 18,894 | 22 |
| 7 | 6,540 | ----- | ----- | ----- | ----- | 1,915 | 1,500 | 118 | 392 | ----- | 11,830 | 11,830 | ----- | 22,220 | 23 |
| 849 | 239,329 | 16 | 2,292 | 1 | 250 | 2,971 | 2,346 | 296 | 323 | ----- | 2,950 | 2,950 | ----- | 20,760 | 24 |
| ----- | ----- | ----- | ----- | ----- | ----- | 265,336 | 29,520 | 22,489 | 213,377 | ----- | 2,367,610 | 2,305,788 | 61,822 | 3,266,020 | 25 |

TOWNS UNDER 20,000 IN POPULATION: 1900.

| | | | | | | | | | | | | | | | |
|-------|-------------|-------|-----------|-------|-----------|-----------|----------|-----------|-----------|----------|-------------|-------------|-----------|--------------|----|
| 3,096 | \$2,389,755 | 2,920 | \$594,459 | 1,683 | \$166,263 | \$337,275 | \$66,697 | \$112,084 | \$648,318 | \$10,176 | \$9,828,109 | \$9,506,338 | \$321,771 | \$17,172,114 | 1 |
| 565 | 206,949 | 14 | 2,470 | 6 | 628 | 27,701 | 4,646 | 5,264 | 17,791 | ----- | 327,672 | 313,737 | 13,935 | 694,511 | 2 |
| 473 | 129,832 | 230 | 36,300 | 143 | 10,576 | 42,289 | 6,638 | 6,112 | 29,359 | 180 | 557,261 | 540,505 | 16,756 | 953,722 | 3 |
| 268 | 83,933 | 195 | 26,519 | 115 | 9,166 | 23,177 | 580 | 4,365 | 13,242 | ----- | 600,524 | 591,294 | 9,230 | 1,033,749 | 4 |
| 534 | 244,292 | 6 | 1,970 | 10 | 1,254 | 39,144 | 12,065 | 6,479 | 13,200 | 7,370 | 551,317 | 541,411 | 10,406 | 1,171,378 | 5 |
| 103 | 22,188 | 8 | 975 | 3 | 727 | 5,684 | 1,368 | 1,273 | 2,627 | 416 | 78,083 | 70,667 | 2,516 | 160,715 | 6 |
| 2,781 | 787,180 | 1,591 | 365,921 | 442 | 48,219 | 409,320 | 17,735 | 42,346 | 348,779 | 400 | 3,534,218 | 3,462,085 | 82,133 | 6,039,799 | 7 |
| 368 | 89,944 | 224 | 35,828 | 226 | 18,973 | 30,916 | 2,943 | 6,975 | 19,238 | 1,700 | 1,043,269 | 1,030,322 | 12,947 | 1,489,412 | 8 |
| 496 | 118,642 | 45 | 7,525 | 63 | 6,490 | 13,325 | 4,325 | 3,037 | 10,943 | ----- | 460,952 | 454,212 | 12,740 | 735,221 | 9 |
| 522 | 146,776 | 293 | 55,358 | 236 | 27,656 | 44,931 | 1,012 | 8,973 | 34,946 | 50 | 561,874 | 540,717 | 21,157 | 1,079,133 | 10 |
| 331 | 75,599 | 174 | 33,745 | 211 | 23,814 | 33,493 | 1,996 | 5,451 | 31,106 | ----- | 463,372 | 447,345 | 16,027 | 732,053 | 11 |
| 591 | 171,233 | 24 | 4,055 | 68 | 4,869 | 37,926 | 3,433 | 4,034 | 30,479 | ----- | 366,114 | 373,710 | 12,398 | 764,959 | 12 |
| 360 | 59,505 | 49 | 8,240 | 47 | 4,822 | 43,451 | 1,595 | 6,510 | 35,346 | ----- | 403,963 | 394,315 | 9,648 | 679,139 | 13 |
| 739 | 223,627 | 97 | 15,553 | 108 | 9,069 | 75,793 | 8,421 | 11,175 | 66,202 | ----- | 337,990 | 337,990 | ----- | 1,570,273 | 14 |